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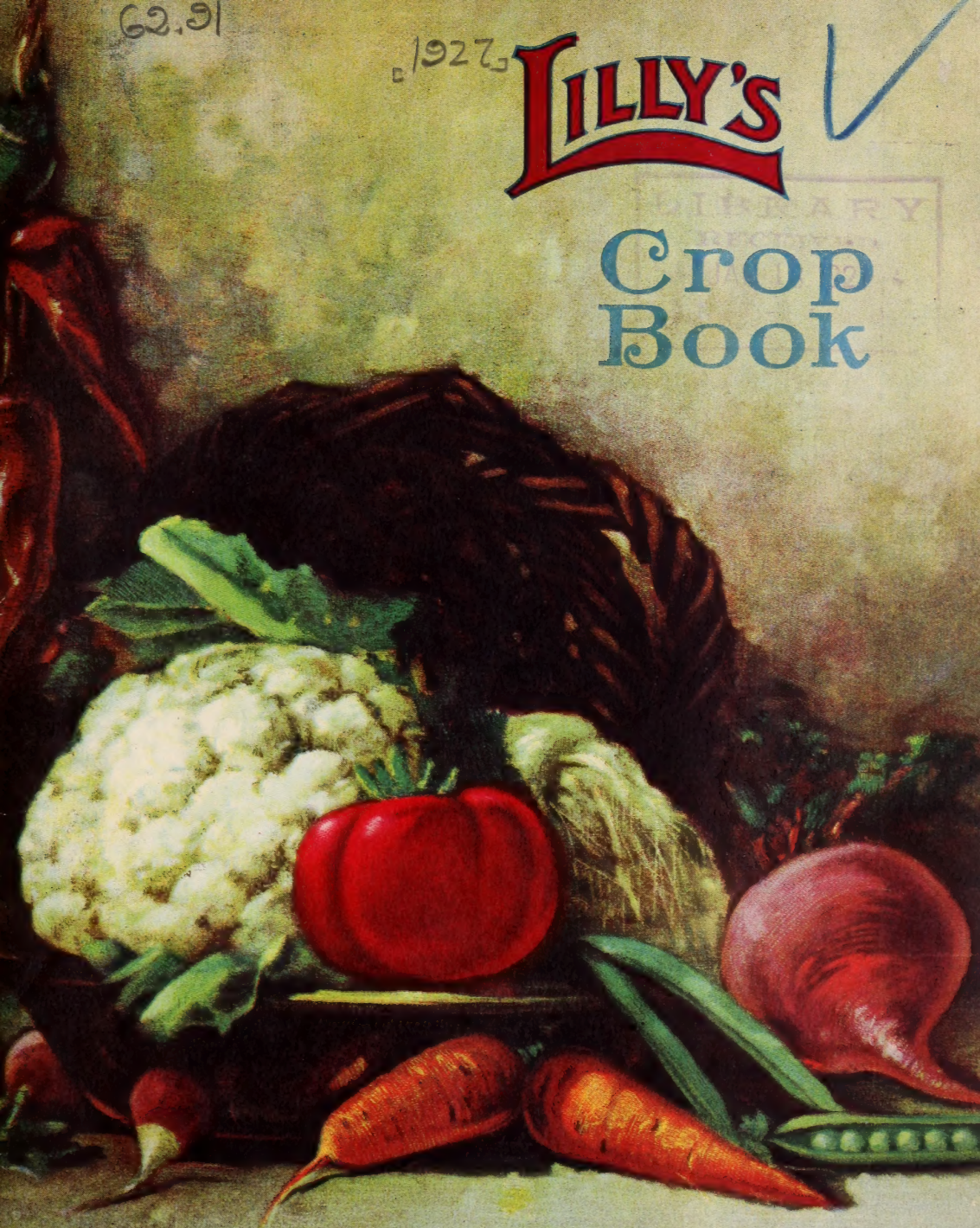
LILLY'S Crop Book



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A COMPLETE FERTILIZER

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Per Pkg.

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Plants are made vigorous and thrifty.

Flowers are increased in numbers and intensified in color.

MORCROP Tablets

are the most highly concentrated complete fertilizer obtainable—1000 tablets contain as much available plant food as a load of stable manure—and, they are water soluble, therefore immediately available

The Chas. H. Lilly Co.

Look for the Counter Display Carton at
YOUR DEALER'S STORE

INFORMATION BLANK

The Chas. H. Lilly Co.,

Gentlemen: Please quote today's prices on the following Seeds, etc.

QUANTITY (Packets Ozs., Lbs.)		NAME OF SEEDS, ETC., REQUIRED	LOT NO.	PRICE RATE	EXTENSION OF COST	
		BE SURE TO FILL IN YOUR NAME AND ADDRESS				

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R.F.D. No. _____

Post Office _____ *State* _____

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LILLY'S SEED ORDER

For Information Blank Reverse This Sheet

Name..... Date.....

Post Office..... Box..... State.....

A list of the Seeds, etc., needed should be made up as you go through the Crop Book. It will come in handy when you go to your store for your seed or can be mailed to us direct as an order. The Chas. H. Lilly Co., Seattle, Wash., and Portland, Ore.

The Chas. H. Lilly Co. gives no warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds it sells, and will not be in any way responsible for the crop.

QUANTITY (Packets Ozs., Lbs.)		NAME OF SEEDS, ETC., REQUIRED	LOT NO.	PRICE RATE	EXTENSION OF COST	
		BE SURE TO FILL IN YOUR NAME ADDRESS AND SHIPPING INSTRUCTIONS				

Packages *Boxes* *Bags* *Bbls.* TOTAL AMOUNT REMITTED

LILLY'S

REVISED

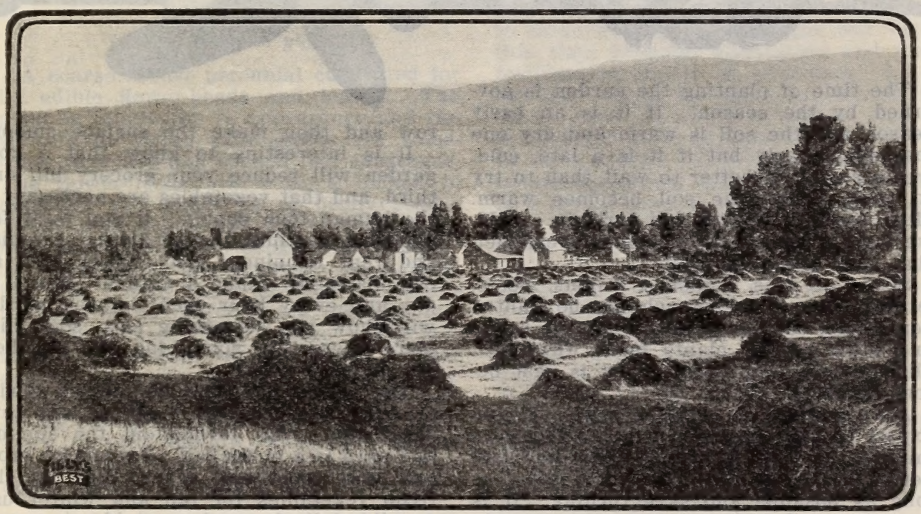
CROP BOOK

Cultural information applying directly to the production of Vegetables, Flowers, Grains, Grasses and Forage Crops in the Pacific Northwest with recommendations as to the varieties best adapted to this region.

Published by

THE CHAS. H. LILLY CO.

Growers of Vegetable, Flower and Field Seeds
Manufacturers of Fertilizers, Feeds and Flour



ADDRESS ALL CORRESPONDENCE TO

The Chas. H. Lilly Co.

Established 1885

Factory and Main Office:
1647 West Hanford St., Seattle, Wash.

Branches

Front and Yamhill Sts.
Portland, Ore.

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Seattle, Wash.

A GOOD NAME LILLY'S WELL KNOWN

Vegetable Gardening

The time of planting the garden is governed by the season. If it is an early season and the soil is warm and dry one may plant early but if it is a late, cold, wet spring it is better to wait than to try to plant before the soil becomes warm. Most seeds, if planted too early in a cold, wet soil, either rot or become so weakened that they never do well.

Seeds of peas, radishes, onions, beets, lettuce, carrots and spinach may be planted very early, but corn, melons, squash, beans and other tender plants must wait until all danger of late spring frost is past before planting.

Always plant in straight rows. If you expect to cultivate with a horse the rows must be at least 18 inches apart and had better be 24 inches. Have the rows as long as possible and save turning. It is sometimes advisable to have the rows in sections but usually it is better to have only one kind of vegetable in a row.

There is no hard and fast rule for depth of planting. If the season is cold and late do not plant as deep as you would if it were warm and early. Large seeds like peas, beans and corn should be planted deeper than small seeds like carrots, lettuce, turnips and celery. Very small seeds should be planted just as near the surface as can be planted and yet be covered.

More people fail to get a good stand of plants because they do not firm the soil around the seed than from all other causes together. When planting seeds like peas, corn, beans and in fact, any kind except the very fine seeds like celery or some of the flower seeds it is best to tramp the row and then make the surface smooth.

It is interesting to know that a good garden will reduce your grocery bill one-third, and that vegetables are necessary in the human food supply. If you want fascinating pastime, health-giving exercise, and that happiness that comes with accomplishment—make a garden. Begin today and every hour spent in your garden will show you something new, something more interesting, something that will help you to enjoy living.

The wide-awake gardener begins sowing as early in spring as possible, and sows succession crops throughout the summer and until late in the fall. Succession crops are most important since they provide fresh vegetables for fall and winter use. A cellar full of stored vegetables is a good investment. Grow all the vegetables your garden can produce, eat them fresh, evaporate them, can them, store them, and be independent of high food prices.

World-famous scientists have discovered by actual laboratory tests that many diseases, like rheumatism, gout, nervous troubles, etc., originate from the collection of poisonous germs in the intestines. These famous physicians have pointed out that the way to avoid this condition is to use salads, such as chicory, collards, cabbage, lettuce, spinach, etc., plentifully. Europeans have known this for years. The French call spinach "the broom of the stomach." If you would have health, grow salad plants plentifully, and use some form of salad vegetable every day.

Vegetable Seeds

Lilly's Seeds in bulk, as well as in packets, are sold by the leading dealers in almost every town throughout the Northwest. You will appreciate the prompt service you can get in being able to buy a product of recognized merit from your local dealer with whom you enjoy a personal acquaintance. For your own protection, for your dealer's protection, and for our protection, we ask that you insist on getting the Stock Number of every lot of bulk seeds you buy. The Stock Number identifies the seed and by its means we can trace the origin, age, purity, germination, etc., in running down any misunderstandings or complaints that may arise.

Artichoke

Green Globe

1 oz. makes 200 plants.

A coarse robust perennial cultivated for its edible flower-heads and leaves. The plant is thistle-like in appearance and the suckers or young side shoots are sometimes blanched and cooked like asparagus. The flower-heads are 3 to 5 inches in diameter and made up of fleshy scales. These outer scales and the bottom of the head are eaten raw or cooked. The "choke" or florets inside are removed. As soon as the blue florets show between the scales the head is too old for eating. Heads must be kept picked off to insure continuous supply. Although the Artcihoke is perennial, the plant declines in vigor after it has borne two or three crops and new plants should be started every other year. Grow in rich, mellow, warm soil setting the plants 3 feet apart in rows, 5 feet apart; mulch the plants well over winter.

"LARGE FRENCH" ARTICHOKE, the most satisfactory variety, a good producer, considered a delicacy on the city markets.

Pkt., 10c; Oz., $1.25

ARTICHOKE, JERUSALEM—See Forage Crops Section.

Asparagus

1 oz. for 40 feet of row. 2 lbs. makes plants for an acre.

A perennial herb, cultivated for the succulent young shoots in the spring. It is native to Europe and Asia and has been in cultivation over 2,000 years. It is naturally a rugged, hardy plant that will live almost anywhere, but for the table we want thick, deliciously succulent shoots which are produced only from roots set in deep, very rich, mellow soil. It takes three years to establish a good asparagus bed, during this time frequent cultivation and heavy fertilization should be practiced. Do not cut any shoots for table use during this time. Start the plants in mellow, rich soil in spring in rows 16 inches apart and thin to three inches. Transplant the first fall to the permanent bed, setting the roots 6 or 7 inches deep in rows 5 to 6 feet apart and 2 feet apart in the rows. Practice clean cultivation, other crops can be grown between the rows the next two years. After that ridge loose well worked soil to a depth of a foot over the rows early each spring to induce long, tender, well-blanched shoots. Level again after the cutting season is over and continue clean cultivation. Each fall cut the matured stalks and remove them from the patch. Make a heavy application of Morcrop Fertilizer each fall and before hilling in the spring, spread half a pound of common salt per square yard over the rows.

WASHINGTON GIANT RUSTPROOF—Thick, heavy, rustless shoots, of rich, dark green color, heavy producer of exceptional flavor.

Pkt., 10c; Oz., 50c; ¼ lb., $1.50

CONOVERS COLOSSAL—Early, large white shoots, tender and delicious.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

GIANT ARGENTEUIL—A French sort having very thick green shoots with few scales and round heads.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

PALMETTO—Early and prolific, thin-pointed shoots, deep green.

Pkt., 10c; Oz., 20c; ¼ lb., 45c

Beans

Bush Varieties

1 lb. for 250 feet of row. 90 lbs. plants an acre.

Bush Beans are easy to grow, and for that reason are more extensively grown than the pole varieties. They should not be planted until late in spring, after all danger of frost and chilly weather are past and the soil is thoroughly warmed. For succession plant at intervals of a week or two weeks until the middle of June.

The ordinary Bush Beans make no great demands for soil fertility. They do well on ordinary soil. Planting in hills of 3 or 4 every 16 inches, or, in drills 3 or 4 inches apart singly, are both good methods, the rows being 2 to 3 feet apart. Cover loosely 1 to 1½ inches deep. Keep the soil well cultivated and pick the beans as soon as ready, clean picking promotes continuous production. Beans should not be cultivated when wet with dew or rain as that promotes the development of rust.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.00

Green Podded Sorts

REFUGEE 1000 TO 1—Very productive, slender round pods of fine quality, medium late, in favor for canning.

STRINGLESS GREEN POD—Very early, round, meaty green pods, entirely stringless and of excellent quality.

DWARF HORTICULTURAL — Medium length, green pods splashed with bright red, quite early, useful green or dried.

BROAD WINDSOR—The old English "Broad Bean" used largely as a green-shelled bean, pods are borne upright at the axil of the leaf and stem.

BLACK VALENTINE—The pods are nearly round or slightly flattened, medium size, dark green. They hold their attractive appearance on the market.

Yellow Podded Sorts

JONES STRINGLESS—Delicious, waxy yellow pods, very large, almost straight, plump and brittle, stringless and fine flavored, seeds are white.

GOLDEN WAX—Medium length, flat, broad, golden yellow pods, popular for market and home garden.

GOLDEN JERSEY WAX—An improvement on Golden Wax, pods are larger, more fleshy and if possible more brittle, waxy and stringless.

BLACK WAX—A black seeded exceptionally productive yellow waxy podded bean, pods are curved and well rounded.

DAVIS KIDNEY WAX—Pods are uniform in size, flat, very long, light yellow in color, stringless. Seed is white.

Beans

Pole Varieties

1 lb. for 125 hills. 25 to 40 lbs. per acre.

A warm, rich, rather heavy soil is best, and they will stand heavy fertilization with a fertilizer like **Morcrop-K** in which phosphoric acid and potash predominates, as an excess of nitrogen will cause a too rank growth of foliage at the expense of beans and pods. The ground should be carefully prepared the same as for any other garden crop. Plant in hills 2 to 3 feet apart, in rows 4 feet apart, allowing four or five plants to the hill. Poles 7 to 8 feet long make the best supports. It is usually necessary to give them a little help to wind around the poles; they always wind from right to left. Cultivate and hoe frequently. Keep them picked clean if continuous supply is wanted.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.00

KENTUCKY WONDER—The pods are green, very long, surface wrinkled, brittle and without fibre, early and very prolific.

LAZY WIFE—A popular late variety, pods green, seed white, kidney shaped, excellent dry shell beans. Superior as snaps.

TALL HORTICULTURAL—As a general purpose, late snap and green shell bean for home and market this variety is very popular.

SCARLET RUNNER—Desirable for both culinary and ornamental purposes, bears large scarlet flowers, followed by large, green pod snap beans.

KENTUCKY WONDER WAX—This vigorous wax podded pole bean is very similar to the green podded Kentucky Wonder but the pods are a little broader.

CARMINE—The best all purpose pole bean for the Northwest. Yellowish pods, splashed carmine, stringless.

You will increase the yield of
BEANS and PEAS
by inoculating the seed with
FARMOGERM

Beans

Field Varieties

1 lb. to 300 feet of row. 60 to 75 lbs. per acre.

Generally grown the same as Bush Beans except that the rows are placed far enough apart to allow for horse cultivation, and they are not harvested until the seed is fully matured. They are frequently referred to as dry-shell beans on that account.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.00

LADY WASHINGTON—Earlier, larger and more productive than the Navy Bean. Especially adapted to the West.

SMALL WHITE NAVY—The universally popular "Navy Bean," excellent for baking as well as boiled or in soup.

Beans

Limas

1 lb. for 100 hills.

Tall lima beans will not usually succeed in the Northwest, but the dwarf limas are more or less successful. The culture is the same as for bush beans, except that they are even less hardy and should be planted a week later.

KING OF THE GARDEN—Unsurpassed for production in places where "Limas" thrive, seeds and pods both large. The best Pole Lima.

OREGON POLE LIMA—Pods are well filled, having three to five large beans of the finest quality. It can be planted in any garden soil as early as April or late as July.

BURPEE'S BUSH LIMA—A medium early bush variety bearing very large pods and beans of fine quality.

Prices All Varieties

Pkt., 15c; ½ lb., 25c; 1 lb., 50c; 10 lbs., $4.50

A steel Trowel like this one

will come in handy for many uses.

No. 80 Steel Trowel, each 20c

Beets

Table Varieties

1 oz. for 100 feet of row. 4 to 6 lbs. plants an acre.

Like all root crops the beet needs a loose, light, rich soil which must be in the best condition of tillage. Only good commercial fertilizer like Morcrop, or well rotted manure should be used. Plant in rows 14 to 20 inches apart and thin to 3 inches in the row. Cover the seed one inch deep. Succession plantings should be made, the first planting one as early as the ground can be worked in the spring. They are often ready for use in 8 to 10 weeks. The round, or turnip varieties are grown for summer use. The long varieties are grown for winter use, and on the Pacific Coast may be left in the ground all winter and pulled from time to time as needed.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., $1.00

EARLY WONDER—An extra early heart-shaped, smooth beet of exceptional quality, color is rich crimson, faintly zoned, sweet and tender.

EARLY EGYPTIAN—An extra early variety, suitable for forcing. The beets are small and flattened, dark red, sweet and tender.

CRIMSON GLOBE—Almost globular in shape, perfectly smooth, medium sized, flesh is deep crimson, very delicious, medium early.

CROSBY'S EGYPTIAN—Better than the old Egyptian from which it has been derived, early, smooth, tender, dark red flesh of finest quality.

DETROIT DARK RED—Its uniform deep, rich color and globe shape make it a very popular market or mid-season maincrop variety, fine for canning.

EARLY BLOOD TURNIP—A flat, turnip-shaped, early sort. The flesh is deep red, ringed pink, sweet and crisp.

LONG DARK RED—A standard long, late variety, flesh is deep purplish red of good quality. An excellent keeper.

ECLIPSE BLOOD TURNIP—Very early, of uniform, globular shape, deep red color, fine grained, tender and sweet.

STOCK BEETS—See Mangel.

SUGAR BEETS—See Forage Crop Section.

Broccoli

1 oz. for 1500 plants. 6 oz. plants an acre.

A winter species of cauliflower which reaches its highest state of perfection in western Oregon and Washington. Its cultivation and requirements are the same as cauliflower, except that it requires a little more room in the field, and that the plants are set out in July. The crop is ready for market during December, January and February. Use Maggotbate to prevent Root Maggots. Morcrop used freely makes healthy plants and large heads.

ST. VALENTINE—Large, firm heads of the finest quality, very early.

Pkt., 10c; Oz., $1.25; ¼ lb., $3.50

LARGE WHITE FRENCH—The popular, well-known variety, medium early, very hardy.

Pkt., 10c; Oz., $1.00; ¼ lb., $3.00

Brussels Sprouts

1 oz. for 2,000 plants.

The requirements of this crop and its general treatment differ but little from those of cabbage and cauliflower. For fall use plant the seed in April and transplant in June. Set the plants 18 to 24 inches apart in the rows and allow at least 3 feet between the rows. As soon as the plants begin to crowd, the leaves should be broken off close to the stalk to give the sprouts room to develop. Only a tuft or rosette of leaves should be left at the top. West of the Cascades the plants are hardy enough to stand the winter and yield "sprouts" several weeks. For winter use the plants should be set during July and August. Frost really improves the quality and flavor of the Sprouts, making them especially popular during the winter months. The dwarf varieties are more closely set with sprouts which are also of larger size. Use Maggotbate to prevent Root Maggots.

DWARF IMPROVED SPROUTS—Two inches in diameter resembling miniature cabbages.

Pkt., 10c; Oz., 40c; ¼ lb., $1.25

Cabbage

1 oz. makes 2,000 plants. 6 to 8 oz. per acre.

Frequent cultivation is one of the best helps for cabbage, it has been aptly said by someone that it should be hoed every day or two. Seed of the early varieties may be sown in seed bed in September and transplanted to cold frame to be wintered over, or may be sown in hotbed in January or February and the plants transplanted to cold frame when large enough.

Seed of the second early or summer varieties should be sown in seed bed or coldframe early in April, and of the late or winter varieties in May or June. The plants will be greatly improved by transplanting once before setting out in the garden or field.

Plants of the early varieties should be set out as soon as the ground is in good condition to work. They should be set 16 to 24 inches apart in the rows and the rows should be 2½ to 3½ feet apart, according to whether to be cultivated with horse or by hand. These should be ready for use in June.

The second early varieties should be set out in May and should mature in July and August.

Late varieties, for winter use, are set out in July, 24 to 30 inches apart in rows 3 to 3½ feet apart. They mature in October or November. In the mild climate of the Pacific Coast they may be left in the ground until wanted for use during the winter. In colder climates they may be placed heads down, in trenches, and covered with sufficient straw and dirt to keep them from freezing.

The plants should always be set in the ground on a cool, wet day, or immediately after a heavy rain, while the ground is wet.

While Cabbage is a gross feeder, it endures much abuse, and thrives on a wide range of soils and conditions. Next to plenty of food, its greatest requisite is plenty of water, yet it requires good drainage and thrives best in cool weather and a moist atmosphere. Cabbage does not head hard in hot weather for that reason the early maturing sorts should be started early and the late varieties quite late in the spring, so as to avoid hot weather at heading time.

Prices All Varieties

Pkt., 10c; Oz., 35c; ¼ lb., $1.00; Lb., $2.75

Early Varieties

EARLY JERSEY WAKEFIELD—The most popular extra early variety, heads are pointed, uniformly hard and of good quality, plants have but few outside leaves.

CHARLESTON WAKEFIELD — The heads are about one-fourth larger than Jersey Wakefield, matures 10 to 15 days later.

EARLY WINNIGSTADT—A little later than Wakefield, heads are similar in shape but larger, and very hard with leaves tightly folded.

Cabbage — Continued

Second Early Varieties

COPENHAGEN MARKET—A very early, round, solid-headed variety, stems are short and the plants very sturdy, heads often weigh over 10 pounds.

LILLY'S GLORY—The heads are of good size, almost perfectly round, extremely solid and heavy, deliciously tender and of finest quality. A splendid keeper.

ALL SEASON OR SUCCESSION—As its name implies it is adapted for either summer, fall or winter use; large, round, slightly flattened heads, holds its "prime" a long time in the field.

EARLY DWARF FLAT DUTCH—Valuable as a second early crop, heads are flattened, compact and of good size, best quality.

Late Varieties

DANISH BALLHEAD—Unsurpassed for winter use, medium late maturing and a splendid keeper, heads are round, medium size and very hard, a fine Kraut cabbage.

LARGE LATE DRUMHEAD—The heads are large, solid and of good texture, flattened on top but very deep. Can be kept in good condition until spring, excellent shipper.

PREMIUM LATE FLAT DUTCH—A slow growing, sure heading popular late variety, large spreading outside leaves, very large flat heads, keeps well and of fine flavor.

Miscellaneous Varieties

DRUMHEAD SAVOY—A large solid heading crumpled leaved variety with the rich flavor of cauliflower. Frost improves it.

RED DUTCH—Has small heads of the finest quality for pickling, keeps good and heads are very hard, color deep purple-red.

PE TSAI—Chinese or Celery Cabbage. Heads long like Cos Lettuce, hearts blanch white and crisp, fine for salads, plant in July.

A wonderful labor-saving tool for the growers of Cabbage, Tomatoes, Cauliflower, Kale, etc., is the

MASTER PLANT SETTER

One man can set and water 8,000 to 15,000 plants per day.

Weight 5 lbs. each. Price only $6.50

Carrot

Table Varieties

1 oz. for 250 feet of row. 2½ lbs. per acre.

The Carrot requires a loose, friable, warm soil, in the very best mechanical condition, this needs to be liberally fertilized with Morcrop or well-rotted stable manure. The seed should be sown as soon as the ground is warm and dry enough, in rows 1 to 2 feet apart. As the seed germinates slowly the land should be free from weeds. Thin when large enough, to stand 2 to 3 inches apart. Careful, clean, cultivation is required, and drought must be avoided if large, succulent crops are wanted. Young carrots find a ready market all summer, and the matured roots can be stored for winter, or in climates like western Washington and Oregon, can be left in the ground until wanted for use. The seed is rather slow to germinate.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 40c; Lb., $1.00

GOLDEN HALF LONG—By far the best carrot for market and home use, roots are half-long, smooth, of uniform orange-red color and exceptionally sweet.

SHORT HORN—Best for early use, fine for forcing, roots are short (2 to 3 inches), tops small. They grow very quickly.

CHANTENAY OR MODEL—A stump-rooted or half-long sort, broad at the shoulder, tapers to a blunt point, fine grain, coreless, tender and medium early.

DANVER'S HALF LONG—An especially hardy sort, popular with gardeners who grow large fields of carrots; smooth, sweet, well colored, second early.

OXHEART OR GUERANDE—Desirable in hard or shallow soils, roots are thick and short, bright orange in color, fine grained.

IMPROVED LONG ORANGE—A selected strain of the popular long-rooted type, roots are uniformly thick, tapering to a point, valuable for both table and stock, late.

NANTES OR HALF LONG SCARLET—The roots are very symmetrical, smooth and of bright orange color, 5 to 6 inches long.

STOCK CARROT—See Forage Crops Section.

Use **MORCROP** Fertilizer

Cauliflower

1 oz. for 1,500 plants. 6 oz. plants an acre.

Select your richest land for Cauliflower, a strong loam is best, plenty of fertilizer well incorporated with the soil and the latter brought into the highest state of tilth.

Cultivation and soil should be very much the same as for cabbage, but it is more difficult to grow. To produce perfect heads cauliflower requires a cool, moist season and a rich, moist, loamy soil. In the Sound country cauliflower does exceedingly well in the average season. For a spring or early summer crop sow in March or early in April, in hotbed, and transplant to a cold frame when sufficiently large, and to the open ground as soon as danger of hard freezing is over. For a late crop sow at the same time as for late cabbage and treat in the same manner. With the early cauliflower, when the heads begin to form, the leaves should be brought over and tied around the heads to blanch them. The heads should be cut for use when the "curl" is very compact or hard, as they soon become tough and bitter after they open and separate into branches. Best results will be obtained by planting either very early or very late, in order to avoid the hot midsummer season when heads are being formed. Fertilize with Morcrop Fertilizer. Use Maggotbate to prevent root maggots.

The principal requirements of the crop are a high degree of soil fertility, perpetual moisture with proper drainage, and protection from excess heat. Start the plants in a seed bed and transplant while quite young to a well prepared field. Set the plants 2 to 2½ feet apart in rows 3 to 4 feet apart. Stir the soil frequently.

Early Varieties

EARLY ALBA—A large, compact heading, extra early type, a sure producer of snow-white heads of excellent flavor and quality.

Pkt., 25c; ¼ Oz., $1.20; 1 Oz., $3.50

SNOWBALL—The standard early sort, heads medium size, but compact, uniform, white and nicely flavored.

Pkt., 10c; ¼ Oz., 85c; 1 Oz., $2.50

Late Varieties

VEITCH'S AUTUMN GIANT—A large, late variety with quite compact, white heads, known as California Wonder.

Pkt., 10c; ¼ Oz., 35c; 1 Oz., $1.25

LARGE LATE ALGIERS—A valuable sure-heading sort that is popular with market gardeners, the large upright leaves protect the tender heads against frosts.

Pkt., 10c; ¼ Oz., 35c; 1 Oz., $1.25

DANISH DRY WEATHER—Especially adapted to dry locations, but also an excellent variety for good cauliflower districts, a sure header.

Pkt., 25c; ¼ Oz., $1.10; 1 Oz., $3.00

Celery

1 oz. for 8,000 plants. 4 oz. plants an acre.

Sow the seed in hotbed, cold frame or seed bed early in spring. Transplanting once or twice before setting the plants in the garden will be very beneficial. The tops should be clipped off to induce stockiness, and when transplanting, the ends of the roots should be cut off.

Celery requires a deep, very rich, moist soil. Fresh stable manure is liable to make the celery coarse, stringy, and of inferior flavor, but well-rotted manure may be used if applied some time before planting.

The plants may be set in the garden after some early harvested crop has been removed. They should be set six inches apart in rows three feet apart. The writer has seen celery planted in rows 16 inches apart on land in the highest state of cultivation, tilth and moisture where no blanching was required, the growth being so dense as to automatically exclude the light. They should be given frequent cultivation.

When the plants have attained considerable size, the leaves should be drawn up and a little soil compacted about the base of the plants to hold them upright.

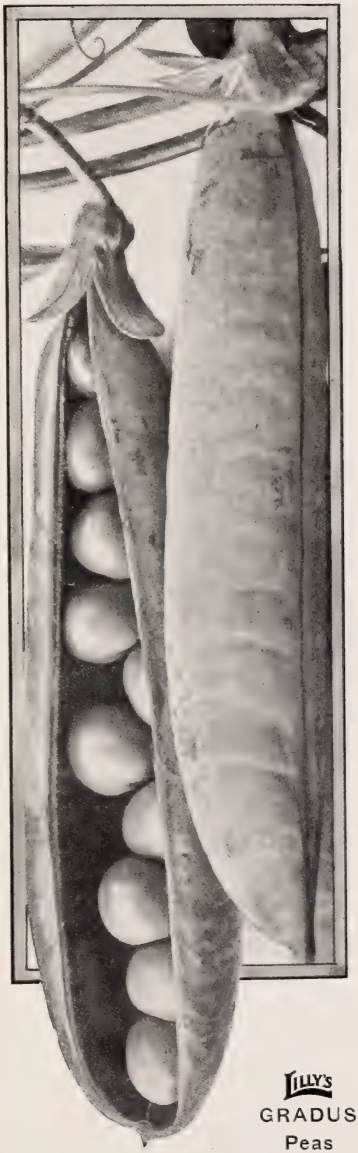
There are several ways of blanching the plants, but the favorite method is with boards. When the plants are a little more than a foot high, set twelve-inch boards on edge close to the plants on both sides of the row. Let the tops of the boards lean together against the plants so that they will be only two or three inches apart. Hold the boards in this position by nailing across the tops. A few of the leaves will show above the boards. The foliage will soon fill the space, excluding the light, and the stalks will be blanched in ten to twenty days.

If the plants are blanched with earth, care must be taken that the crowns do not become filled.

Celery may be kept for winter use by banking with earth and covering the tops with leaves or straw to keep it from freezing. Or it may be dug and removed to a cellar, cold frame, vacant hotbed, or pit, and reset close together with the roots bedded in earth. While in storage it should be kept as cool as possible without freezing.

The seed is slow to germinate and the seed bed must be in perfect condition.

Fertilize freely with Morcrop and side dress with Nitrate of Soda and Sulphate of Potash.



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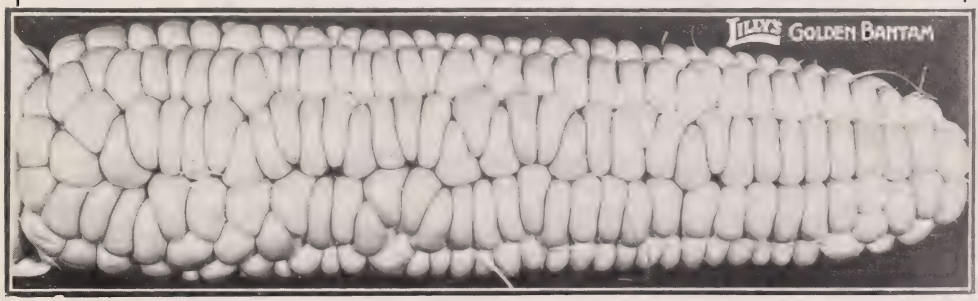
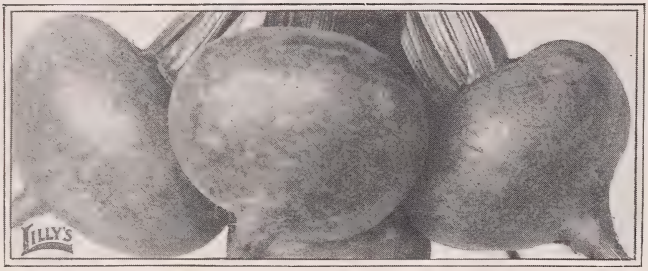
GRADUS
Peas
Superior for sweetness and yield

LILLY'S
PALO ALTO
Parsnip
Fine texture, white flesh, very rich

LILLY'S
GOLDEN
Half Long
Carrot
Orange-red and very sweet

LILLY'S
GOLDEN BANTAM
Corn
Sweetest and earliest

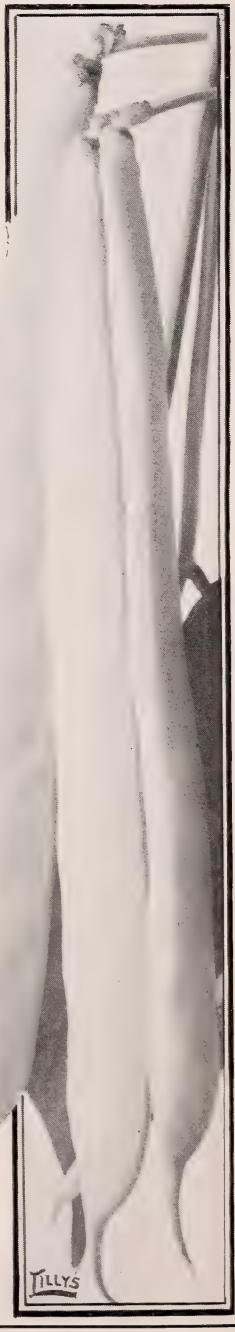




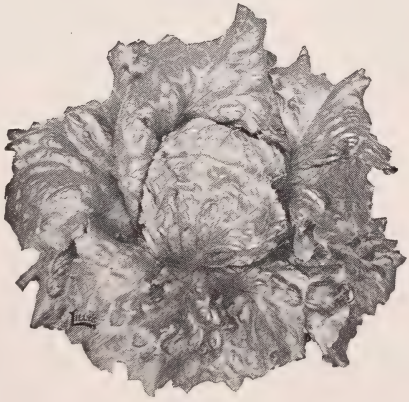
TILLY'S
EARLY WONDER
Beet
Extra early, dark crimson, exceptional quality

TILLY'S **GLORY Cabbage**
Round, extremely solid, good keeper

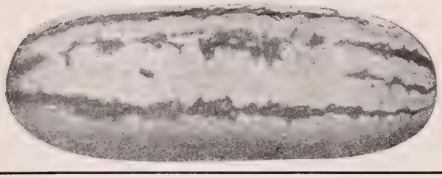
TILLY'S
JONES STRINGLESS
Beans
Stringless and very prolific



TILLY'S
NEW YORK OR WONDERFUL
Lettuce
The most popular Head Lettuce in America



TILLY'S
GEORGIA RATTLESNAKE
Watermelon
Very large and long, sweet scarlet flesh



PARIS GOLDEN YELLOW—Semi-dwarf, has numerous stalks, heavily ribbed, of golden yellow color, very crisp and tender, very early and practically self-blanching.

Pkt., 10c; Oz., $1.00; ¼ lb., $2.75; Lb., $8.00

SILVER PLUME—Early, attractive in appearance, blanches quickly, medium in size, hearts are pure white, brittle, free from stringiness and of fine flavor.

Pkt., 10c; Oz., 50c; ¼ lb., $1.50; Lb., $4.00

GOLDEN SELF BLANCHING—The standard early self-blanching, leaves yellow, easy to grow.

Pkt., 10c; Oz., 50c; ¼ lb., $1.50; Lb., $4.00

GIANT WHITE WINTER—Unequalled as a late or winter celery, requires blanching with earth or boards, grows very tall, on the Coast can be left in the garden until wanted; white, brittle and fine flavored.

Pkt., 10c; Oz., 50c; ¼ lb., $1.50; Lb., $4.00

Celeriac

1 oz. for 400 feet of row.

An off-shoot of the Celery species, producing an edible root, instead of edible stalks. Just how long it has been in cultivation is unknown, but it has been traced beyond the middle of the 17th century.

In general the culture is the same as for celery, except that no blanching is required. Start the plants in a hotbed or plantbed and transplant once before setting out to the permanent location. The seed germinates slowly and must be kept well watered. In the garden the rows should be two feet apart and the plants six to eight inches apart. Aside from frequent tillage, Celeriac requires but little attention. The principal use of Celeriac is for flavoring soups and stews, but it is also served in several ways. It may be boiled like Cauliflower, or served in a salad with beets and turnips.

LARGE PRAGUE—Good sized, smooth round roots, turnip shaped.

Pkt., 10c; Oz., 35c; ¼ lb., $1.20

Collard

1 oz. for 2,000 plants.

A non-heading form of cabbage grown extensively in the south for greens. Not adapted to the north.

Pkt., 10c; Oz., 20c; ¼ lb., 65c.

Chervil

1 oz. for 250 feet of row.

The cultivation of Curled or Salad Chervil presents no difficulties. The leaves are ready to use in six to ten weeks from planting and any good garden soil is congenial. It thrives best during the cooler months of the year and likes moisture. The leaves are very aromatic and are used like parsley, which they resemble.

Pkt., 10c; Oz., 25c; ¼ lb., 80c

Chicory

1 oz. for 200 feet of row.

A native of Europe, and familiar to many as a weed. Used principally as a potherb, a salad plant, and as an adulterant of coffee. Succeeds where other rootcrops thrive and requires practically the same cultural attention as carrots and parsnips. The young, tender roots are boiled and served with butter and seasoning. As a potherb, the young leaves are equal to those of dandelion. They are cut when six or eight inches long and boiled (in two waters to remove the bitter taste), and served like spinach. For salad, the matured roots are dug and trimmed, removed to the vegetable cellar, packed in moist earth, quite close together with the crowns protruding about an inch. Place an inverted box over them and in three or four weeks you have an abundance of fine white leaves. Cut when about six inches long and use as a salad, boil like kale, or cut up like cold slaw. The roots when matured, sliced and dried have a strong coffee flavor and they are often used to adulterate that article.

Pkt., 10c; Oz., 40c; ¼ lb., $1.10; Lb., $3.00

Chives

1 oz. for 250 feet of row.

An onion-like plant used as a salad and for flavoring soups. It also makes an excellent ornamental garden bed edging which may frequently be cut, a new growth of leaves appearing soon after each cutting. The plants grow about ten inches high. One sowing will answer for about three years.

Pkt., 10c; Oz., $1.00; ¼ lb., $3.00

LILLY'S MAGGOTBATE

Prevents root maggots on Radish, Cabbage, Onion, etc.

Corn Salad

1 oz. for 250 feet of row.

Known also as Lambs Lettuce, it is a native of Europe. Sow the seed in October or November like winter spinach or very early in the spring like lettuce. Likes an abundance of water, and light, rich, well worked soil. Matures in 60 to 65 days during growing weather and makes a mild salad (best when blanched) or can be used as a potherb like spinach.

Pkt., 10c; Oz., 30c; ¼ lb., $1.00; Lb., $3.00

Corn

Table Varieties

1 lb. plants 100 hills or 300 feet of row in drills. 12-15 lbs. per acre.

Corn has been grown in America since pre-historic times, having been the principal cereal in the ration of the Indians. The principal kinds of corn now in cultivation are, Sweet Corn, Pop Corn and Field Corn, all of which are important crops in all but the extreme southern states. All the varieties are tender and should not be planted until danger from frost has passed. About April 15th to 20th is considered safe planting time for sweet corn, although earlier planting is well worth a trial for a portion of the crop.

Corn requires a rich, well prepared seed bed. Ten to fifteen sacks of Morcrop per acre is a profitable investment. Work it into the topsoil before planting. Plant the seed in drills three feet apart and thin to a single stalk every foot in the rows, or five or six kernels may be planted in hills, three feet apart each way, and thinned to three plants in each hill. Cultivation should be for the purpose of conserving the soil moisture, as well as to kill weeds, and should be frequent. Corn develops an extensive, shallow, root system for which reason it is necessary to make each succeeding cultivation shallower than the last, to avoid damaging the root system toward the latter part of the season. Keep the surface covered with a dust mulch and you have an ideal growing condition for corn. Do not allow the suckers (side shoots) to develop, if you want large, uniform ears.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.00

GOLDEN GIANT—Produces large ears of very sweet, tender, deep golden corn, the flavor is wonderful and the yield large, should be grown in every garden.

GOLDEN BANTAM—Very early, sweet and delicious, the ears are short but thickly set with plump, creamy yellow kernels which turn golden as it ripens, very popular.

JACK FROST—The earliest white sweet corn especially adapted to Northwest conditions, kernels are large, of delicate flavor and melting tenderness, remains tender a long time.

COUNTRY GENTLEMEN—A splendid late variety, the cob is small but densely crowded with irregular rows of deep, slender white kernels of excellent quality.

STOWELL'S EVERGREEN—An old favorite late, white variety, ears are large, kernels tender and sugary and remains a long time in condition for table use.

EARLY MINNESOTA—A standard second early variety of white corn, kernels are broad, sweet and tender, ears long and thickly set with ten or twelve rows of kernels.

CORN—Field Varieties. See Forage Crop Section.

Cress

(or Pepper Grass)

1 oz. for 50 feet of row.

Its leaves have the pleasant pungency of Water Cress, and may be used more freely as a condiment, to be served with salads, or for garnishing. The seed sprouts very quickly and can be planted very early in the spring. It can be cut repeatedly but for best results frequent plantings should be made. Any good garden soil will do.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

Water Cress

Its medicinal properties have made it a favorite salad plant for ages. Easily grown along ditches, pools and streams. Plants can be started in a well-watered trench in the garden and transplanted. Can be grown to maturity in tubs if covered with water which is changed frequently.

We offer a distinctive variety of cress with small oval leaves, which are used for salad. It must be grown in shallow water and the seed is scattered along the banks of streams or ponds.

Pkt., 10c; Oz., 60c

DuPONT SEMESAN
Is the Premier Seed Disinfectant.

Cucumber

1 oz. plants 100 hills. 1-2 lbs. per acre.

Cucumber plants are very tender, will not endure frost or chilly weather, and should not be planted out of doors until late in spring after the weather is thoroughly settled and the soil is warm. They require a light, rich, warm, porous soil, very heavily fertilized. It is difficult in the Puget Sound country to make them mature all their fruit before being killed by frost in the fall, and they must be forced in every way possible. The plants may be started in berry boxes or in inverted pieces of sod in the kitchen window or in the hotbed, planting a half dozen or more seeds in each box or sod the latter part of April. By the time that they should be planted out of doors they will have attained a height of eight or ten inches and will be about ready to vine. Set in the garden a little deeper than they stood in the boxes, removing the boxes without disturbing the soil around the roots. Fertilize generously with Morcrop to hasten the time of fruiting. After danger from beetles is past thin to three plants to the hill.

There are many methods of planting. Some plant in hills six feet apart each way; others plant in hills six by two or three feet, and others in drills six feet apart; thinning the plants to one foot apart in the rows. We prefer the latter method. A row of beans or peas may be planted between each two rows of cucumbers. They will protect the cucumbers and will be removed before the space is required by them. The seed should be planted about one inch deep.

Pick all of the cucumbers before they begin to mature, for as soon as the vines begin to mature fruit they cease to produce.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 50c; Lb., $1.50

Table Varieties

PRIDE OF THE PACIFIC—A highly bred strain of White Spine, vines are hardy, vigorous and productive, fruit is smooth, symmetrical, deep green color, flesh sparkling white, crisp and deliciously flavored.

DAVIS PERFECT—Large and uniform in shape, the numerous fruits are smooth and well colored, the flesh for quality and flavor is hard to beat.

LONG GREEN—For slicing the long, firm, crisp fruits are very desirable, they are very dark green and average a foot in length, flesh white and firm.

WHITE SPINE—One of the best sorts for table use, an early vigorous cropper, fruit is covered with fine white spines, flesh of excellent flavor and quality.

Pickling Varieties

BOSTON PICKLING — Medium sized, bright green fruits are borne in great abundance, unexcelled for pickles.

EARLY FRAME—Also called "Short Green" is an early, bright cucumber of medium size, used for both pickling and slicing, very productive.

LEMON CUCUMBER—Shape and color resembles a lemon, has distinctive flavor and lacks the bitterness common to the cucumber.

Pkt., 10c; Oz., 25c; ¼ lb., 70c; Lb., $2.00

IMPROVED TELEGRAPH—A special variety for frame or greenhouse culture, smooth fruits 18 to 20 inches long, deep color; three or four are produced at each joint, highest quality flesh which remains stiff after cutting.

Special Price, per Packet, 25c

Egg Plant

1 oz. for 1500-2000 plants. ¼ oz. plants an acre.

The curious, but valuable vegetable, came to us from the East Indies, and has always been considered a plant for the tropics or at least only the warmer sections of the United States. They thrive in certain parts of the Pacific Northwest and require the same cultural attention as tomatoes. The soil should be rich, warm and mellow. Nothing is to be gained by pruning the plants.

NEW YORK IMPROVED—Very productive; the fruits are large, nearly round, dark purple, free of thorns and of excellent quality.

Pkt., 10c; Oz., 75c; ¼ lb., $2.50

BLACK PEKIN—An early variety with fruits nearly as large as the later sorts. The fruit is nearly round, the skin smooth, black and glossy.

Pkt., 10c; Oz., 75c; ¼ lb., $2.50

You can protect tender garden plants with

Germāco

Hotkaps

They make individual hot-houses over each plant at a very small cost.

Endive

1 oz. for 300 feet of row.

A fall and winter salad plant much relished by those who know it. Transplanting is done in July or August and when plants have reached full development they are blanched, this takes two to four weeks. Blanching is easily done by placing two boards over the row in an inverted A shape.

BATAVIAN BROAD LEAVED — The leaves are broad, twisted and waved, deep green, with thick, white midribs. The inner leaves form a clustering head which blanches to a beautiful creamy white and is crisp and tender.

Pkt., 10c; Oz., 20c; ¼ lb., 50c

GREEN CURLED ENDIVE—A hardy, vigorous variety, bright, deep green leaves usually tinged with rose, blanching to a deep cream color.

Pkt., 10c; Oz., 20c; ¼ lb., 50c

Garlic

1 lb. to 50 feet of row.

A hardy perennial, bulbous plant, closely allied to the onion. It is native to southern Europe. Grown mostly from bulbs or sets. The bulbs are composed of several parts called cloves; these are separated when used for planting. They mature in summer and early fall and where the ground is very rich it may be necessary to break over the tops to help develop large bulbs. The foreign population who come from southern Europe esteem Garlic highly for cookery. Its principal use being for flavoring.

Per lb. of bulbs, 40c

Quantity prices on application.

Herbs

Grown for their medicinal, aromatic and seasoning qualities and for garnishing. Only the most easy to grow are listed. They are to be started from seed in the spring as soon as the ground is warm. The varieties marked (*) are perennials and are hardy in this climate, while the others are annuals and are planted each year.

ANISE—Used for flavoring and garnishing.

Pkt., 10c; Oz., 40c

CARAWAY—Seeds used for flavoring, oil for medicine.

Pkt., 10c; Oz., 50c

***CATNIP**—Leaves used for seasoning, good bee pasture.

Pkt., 10c; Oz., $1.25

***DILL**—Flavoring pickles and medicinal tea.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

***HOREHOUND**—Seasoning and lung medicine.

Pkt., 10c; Oz., 40c

***LAVENDER** — Leaves for seasoning, flowers for perfume.

Pkt., 10c; Oz., 65c

***ROSEMARY**—Leaves for seasoning, tea and oil for medicine.

Pkt., 10c; Oz., 75c

SAGE—Leaves used for seasoning dressings.

Pkt., 10c; Oz., 85c

SUMMER SAVORY—Leaves and flowers for flavoring.

Pkt., 10c; Oz., 65c

SWEET BASIL—Seeds and stems used for flavoring soups and sauces.

Pkt., 10c; Oz., 30c

SWEET FENNEL — Leaves for fish sauces, tea for colic.

Pkt., 10c; Oz., 30c

SWEET MARJORAM—Leaves and shoots for seasoning.

Pkt., 10c; Oz., 80c

TANSY—Used to season puddings and for medicine.

Pkt., 10c; Oz., 75c

***THYME**—Leaves for seasoning, tea for headaches.

Pkt., 10c; Oz., 90c

WORMWOOD—Used to flavor liquors, and for medicine.

Pkt., 10c; Oz., 75c

Kale

1 oz. for 3000 plants. 4-5 oz. plants an acre.

Grown for supplying greens during the fall, winter and spring; also used for garnishing. Of all the cabbage family this is the most tender and delicious. For winter use, sow in September in drills eighteen inches apart, covering the seed one inch deep, and thin to twelve inches apart in the rows. The young plants which are thinned out, may be used for greens like spinach. Plants are hardy and are left in the ground until wanted for use. Frost im-

proves the quality. For summer use plant early in spring. The soil should be very rich.

Fertilize well with Morcrop and cultivate and handle like cabbage.

Prices All Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

EMERALD ISLE—A grand, finely curled, winter variety, 2½ feet tall, improved by frost.

TALL SCOTCH—Grows four feet high, large, plume-like green leaves, deeply cut, fine curled edges.

DWARF GREEN—Vigorous, dwarf, spreading habit, large bluish leaves with frilled edges.

THOUSAND HEADED KALE—**See Forage Crops Section.**

MARROW KALE—**See Forage Crops Section.**

Kohl Rabi

1 oz. for 300 feet of row. 4-5 lbs. for an acre.

The edible portion is the peculiar swollen stem just above the ground. The plant belongs to the cabbage family, but the vegetable resembles a turnip and like turnip should be used while young and tender. If wanted for winter use they should be planted in August. Can be stored like turnip. They grow best in cool weather, and in soil that has been enriched with Morcrop.

EARLY WHITE VIENNA—Combining somewhat the flavor of turnips and cabbage. Large enough to be used in ten or twelve weeks from time of sowing.

Pkt., 10c; Oz., 30c; ¼ lb., 85c

Leek

1 oz. to 150 feet of row. 5-6 lbs. for an acre.

The seed is usually sown in the bottom of a trench and after thinning the plants are hilled up as they grow. A thick fleshy stem is formed which should be blanched with earth before using. It belongs to the onion family, but does not form a true bulb, however, the stem is uniformly thick throughout. Can be stored for winter use like celery.

MUSSELBURG—An improved variety growing to a very large size, with broad leaves spreading like a fan.

Pkt., 10c; Oz., 30c; ¼ lb., 85c

AMERICAN FLAG—Large, sweet and very popular with gardeners.

Pkt., 10c; Oz., 30c; ¼ lb., 85c

Lettuce

Heading Varieties

1 oz. for 3000 plants. 1 lb. plants an acre.

For early crop sow the seed in hotbed in February or early March; transplant the seedlings to cold frames or flats, and when the ground is warm enough transplant to the garden in rows a foot apart and eight to twelve inches apart in the rows.

For general crop, sow when ground is in good condition to work in spring in rows a foot apart and thin the plants to six or eight inches apart. For succession sow at intervals of two or three weeks. The plants which are thinned out may be transplanted to other rows.

Some use only a part of the leaves from the plants, allowing the plants to continue to grow; or allow them to grow thickly in the rows and thin as wanted for use; but it is much better to thin the plants when they are small, allow them to form heads, and use the entire heads.

Lettuce does best in the cool weather in spring and fall. That grown during the hot weather in summer should be protected from the sun, or planted in the shade of some taller crop. It is best when grown quickly, and Lilly's Morcrop is the favorite fertilizer for lettuce in the growing sections. A rich, warm, sandy loam soil is best.

NEW YORK OR WONDERFUL—Outer leaves are large, numerous and well curled, heads are creamy white, crisp, tender and delicious. The most popular variety.

Pkt., 10c; Oz., 35c; ¼ lb., $1.15; Lb., $3.50

Prices All Other Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 70c; Lb., $2.00

DELICIOUS—Very early, compact heads, fine quality and flavor, leaves yellowish green.

MAY KING—Withstands cold, damp weather, heads early, and of fine quality.

NONPAREIL HANSON—A late, large, compact, cabbage-like heading sort that is very popular.

ICEBERG—A decidedly crisp variety, spreading leaves, but hard curled heads, fine flavor.

PARIS WHITE COS—A Romaine type of head lettuce, heads are tall and tightly folded.

Lettuce

Non-Heading Varieties

1 oz. plants 600 feet of row. 4 lbs. plants an acre.

The non-heading type of lettuce is useful principally because it is hardy enough to be planted very early in the spring. It grows rapidly and requires no special care. If cut above the crown it will come again, and therefore, provides an enormous quantity of delicious, tender greens before the weather is warm enough for other vegetables. Usually sown in drills or beds where it is to remain.

Prices All Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 60c; Lb., $1.75

GRAND RAPIDS—Quick growing and stands shipping well, popular for greenhouse forcing.

EARLY CURLED SIMPSON — Light green leaves muchly curled and blistered, crisp and sweet.

LILLY'S FORCING—Quick growing, crimped, light green leaves, excellent forcer, early outdoors.

PRIZEHEAD—Large clustering, savoyed leaves, tinged with red, crisp, tender and sweet.

Mangel or Stock Beet

See Forage Crop Section.

Mustard

1 oz. for 600 feet of row.

As a culinary vegetable, Mustard is used mostly for greens for which purpose the large, succulent, basal leaves are used. These develop best in the early spring and during cool fall weather. Any rich garden soil is suitable for its culture.

Prices Both Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., 90c

SOUTHERN CURLED—Large, crimped, light green leaves, hardy and vigorous.

WHITE ENGLISH—Dark green, small, smooth leaves deeply cut, mild and tender.

LILLY'S TOBACCO SOAP SPRAY
The handy spray for plant lice.

Melon

Musk or Cantaloupe

1 oz. for 40-50 hills. 2-5 lbs. per acre.

The muskmelon is a long season crop, and when grown west of the Cascade Mountains conditions must be favorable and they must be encouraged in every way possible to insure success. The soil must be a warm, sandy loam with an abundance of well-rotted manure and commercial fertilizers.

For an early crop, or for main crop in other than the most favorable localities, the plants should be started in berry boxes or on inverted sods.

In warmer localities the seed may be planted when weather is settled and the soil is thoroughly warmed in spring, in hills six feet apart each way, eight or ten seeds in each hill and thinned to four plants to the hill. Or the seed may be sown in drills and the plants thinned to eighteen to twenty-four inches apart when they have become thoroughly established. Rows of short season crops may be planted between the rows of muskmelons.

Prices All Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

POLLOCK 10-25—Early, closely netted, very small seed cavity, thick luscious flesh of salmon tint, excellent shipper and big yielder.

IMPROVED ROCKY FORD—Small oval shaped fruits, flesh green and thick, rind thin, netted yellow.

BURRELS GEM—Dark green with thin skin, flesh thick, salmon colored, very delicious.

EXTRA EARLY HACKENSACK—Quite large round fruit, deeply ribbed and netted, flesh pale green.

OSAGE or MILLERS CREAM—Medium early, smooth skinned, deeply ribbed, flesh orange colored and very thick.

HEARTS OF GOLD—This is an orange fleshed variety of medium size, ideal as a shipping melon and a desirable mid-season sort for the home garden.

Casaba Melon

1 oz. plants about 40 hills.

Seed may be planted in April or May. Cultivate same as other musk melons but do not water too freely after first setting of fruit is fully grown. The fruits may be picked when the light streaks have be-

come quite yellow. Store the fruits so they do not touch each other, in a cool dark place. When the rind becomes slightly softened and moist, they are ready to cut.

Prices All Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

HONEY DEW—Smooth oval fruits, rind almost white, green flesh with a pleasing sweet flavor.

GOLDEN BEAUTY—The fruits are nearly globular, bright yellow with golden tint, with wrinkled skin, six to eight inches in diameter. The flesh is white, very thick, juicy and sweet.

Watermelon

1 oz. for 20-25 hills. 4-5 lbs. plants an acre.

The cultivation of the watermelon is practically the same as for the muskmelon, except that the plants grow larger and require more room. They should be set in hills ten feet apart each way, or in drills ten feet apart and the plants thinned to three feet apart in the rows.

Prices Following Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

ICE CREAM—Oblong, dark green skin; the flesh is very sweet and deep pink.

KING AND QUEEN—(Black seeded Ice Cream). Spherical in shape, ivory shell, pink center, seeds black. A most luscious, valuable winter melon.

Prices Following Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 40c; Lb., $1.25

GEORGIA RATTLESNAKE—Very large and long, skin striped and blotched, flesh bright scarlet.

KLECKLEY'S SWEET—Very thin rind, medium size, oval, slightly mottled, flesh bright red.

SWEET AS HONEY—Early, oblong, dark green, bright scarlet flesh, clear to the skin, solid core.

FLORIDA FAVORITE—Very large, dark green fruits, skin mottled, flesh deep red, seed white.

TOM WATSON—The best shipper and maincrop melon, flesh rich red, seed white, skin dark green.

KLONDYKE—Although having a very thin rind it is a better shipper because it does not wilt.

Citron Melon

1 oz. plants 25 hills.

Used exclusively for preserves and pickles. Grown the same as watermelon.

RED SEEDED—Small round fruits distinctly striped and mottled, flesh white, late.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

Mushroom Spawn

1 brick for 10 ft. of bed.

There is nothing mysterious about mushroom culture. Well prepared beds, good spawn, properly controlled moisture and ventilation are the only essentials for indoor culture. The average cellar provides the last three of these. The temperature should be between 53 degrees F. and 60 degrees F., but can be as high as 75 degrees F., at spawning time; after that cold is less injurious than heat. Horse manure composted with straw is the best material for beds. Break the bricks of commercial spawn into eight to ten pieces, place these a foot apart and two inches below the surface; after ten days case the bed by covering with one inch of screened loam (not clay or sand). The mushrooms should appear in five to ten weeks and the period of production lasts about three months. Keep the cellar moist by sprinkling the walls; if necessary to water the bed do so after picking. Ventilation should be gradual as direct draughts are harmful.

A special leaflet on mushroom culture free.

LAMBERT'S PURE CULTURE MUSHROOM SPAWN is produced by a new system of selection and inoculation. The pure cultures are taken direct from selected specimens and produce mushrooms of the finest quality of uniform variety and color. In bricks weighing about one and one-quarter pounds. One brick is sufficient to spawn ten square feet of bed.

Brick, 40c; 5 Bricks, $1.75, postage extra

You can use one of these tools to advantage in your garden.

No. 1 Midget Garden Seeder priced at ..... $ 4.85

No. 3 True Temper Hill and Drill Seeder 18.75

No. G2X Am. Gardener Cultivator 7.50

No. 20 High Wheel Cultivator.... 4.95

Okra or Gumbo

1 oz. for 75 feet of row.

Introduced into the United States from Africa, and cultivated for its fruit pods, which are used in soups, catsup, stews, etc. It gives body to these dishes, and imparts a peculiar flavor, a taste for which, however, is easily acquired by most people. The plants are not easily transplanted and should be started in pots to facilitate moving. Set two to three feet apart in good warm garden soil and keep the pods picked off clean if continuous production is wanted.

DWARF GREEN produces long green pods abundantly, very tender while young.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

Onion

1 oz. for 200 feet of row. 4-5 lbs. plants an acre.

For early green onions, "sets" are generally planted during the first open spell in January or February in rows about 12 to 14 inches apart and about one and a half inches apart in the row. This will give very early green onions.

For dried onions, seed is sown, and it requires a rich, well-drained loam. No other soil should be used if it can possibly be avoided. The land should be very rich and it is absolutely necessary that it should have raised a hoed crop the previous season. It is a mistake to attempt to grow onions on weedy or rundown land. To get the best results a heavy top dressing of well-rotted barnyard manure should be well worked into the soil. After this Morcrop Fertilizer containing a large proportion of potash should be used. This should be sown broadcast at the rate of 1,000 pounds per acre.

The cost of growing and cultivating onions is very high and it must be borne in mind that it costs no more to cultivate a crop that yields 800 bushels per acre than it does to cultivate a crop that yields only 300 bushels. When land is in good condition onions may be grown on it from year to year. Seed should be sown as early in the spring as the land can be worked. If intended for hand cultivation, sow in rows 12 to 14 inches apart, and if for horse cultivation about 30 inches apart.

For those who intend raising many onions it will be money well spent to get one of the many good books published in reference to the production of this crop. It will pay to buy the best seed and from reliable sources, as onion seed loses its vitality after the first year.

Prices Following Varieties

Pkt., 10c; Oz., 30c; ¼ lb., 95c; Lb., $2.75

PRIZETAKER—Bright clear straw color, uniform large size and perfect shape, flesh white and fine grained, keeps and ships well.

YELLOW GLOBE DANVERS — Globe shaped, creamy white, crisp, mild flavored, solid flesh.

LONGKEEPER — Marvelous keeping qualities, globe shaped, yellow skin, mild flavor, medium size.

LARGE RED WETHERSFIELD—Very large, flattened bulb, purplish red skin, purple tinged white flesh, strong flavored, keeps well.

AUSTRALIAN BROWN—Early, medium size, almost round, good keeper, brown skin, mild.

Prices White Varieties

Pkt., 10c; Oz., 45c; ¼ lb., $1.25; Lb., $3.75

WHITE QUEEN—Small, best for pickles and green onions, very crisp, waxy white, mild.

WHITE PORTUGAL—Popular medium sized, good for fall and winter planting, silvery white.

SOUTHPORT WHITE GLOBE — Mild flavored, fine grained, crisp, large, snowy white in color.

YELLOW BERMUDA — Medium size, crisp and waxy, mild.

Pkt., 10c; Oz., 55c; ¼ lb., $1.65; Lb., $5.00

SWEET SPANISH — Enormously large and exceptionally mild flavored, much used for sandwiches, skin pale yellow, flesh waxy white.

Pkt., 20c; Oz., 75c; ¼ lb., $2.25; Lb., $7.00

Onion Sets

1 lb. plants 50 feet of row. 250 lbs. for an acre.

Lilly's Onion Sets are northern grown, hardy, handsome, small and of uniform size. We grow only the most suitable varieties which have proven to give best results in our section.

Brown Sets, Pound, 15c; 10 lbs., $1.25
White Sets, Pound, 20c; 10 lbs., $1.75

Parsley

1 oz. for 250 feet of row.

The seed of parsley germinates very slowly and it is well to soak the seed a day before planting. Radishes are often sown with parsley to mark the rows. Be sure to firm the soil well over the seed; this hastens germination. In our mild climate on the Coast parsley lives outside all winter. Used mostly for seasoning and garnishing.

Prices Both Varieties

Pkt., 10c; Oz., 20c; ¼ lb., 45c; Lb., $1.25

CHAMPION MOSS CURLED—Compact growing, hardy, vigorous, with leaves finely curled, excellent flavor.

HAMBURG—A turnip rooted sort, the leaves are used for garnishing, the roots for salads and soups.

Parsnip

1 oz. for 300 feet of row. 4-6 lbs. plants an acre.

The best soil for Parsnips is a deep, clean, rich loam, which offers no obstruction to the uniform expansion of the roots. Prepare it the same as for beets or carrots. Sow the seed quite early in the spring one-half to one inch deep, in rows 15 to 20 inches apart, thinning the plants to three inches as soon as large enough, and cultivate frequently until the plants are sufficiently developed so that the foliage shades the soil, and stops weed growth. The roots may remain in the ground until wanted for use during the winter. They are improved by freezing.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., $1.00

PALO ALTO—Flesh white, fine texture, tender, free from core and stringiness, and of superior flavor, sweet and rich.

HOLLOW CROWN—Roots long, smooth, white skin, uniform in shape, tender and of good quality.

LONG WHITE DUTCH—It grows smooth, long roots of excellent quality and is preferred in some sections to other sorts.

The practice of inoculating legume seeds like peas and beans with FARMOGERM supplies nitrogen gathering bacteria which increases the thrift and vigor of the crop.

Peas

1 lb. for 120 feet of row. 100-150 lbs. per acre.

Green Peas are at their best when perfectly fresh, and should come to the table within five or six hours from the vine. Peas need a rich, friable soil, but an oversupply of nitrogen will result in a rank growth of fruitless vines. Most of the cultivation for Peas should be done before they are planted, and it is most important that the ground be well prepared.

The seed should be sown in drills very early in spring, as soon as the ground is in good condition to work, and covered two or three inches deep. Rows of the extremely dwarf varieties may be as close as 12 to 18 inches apart; the semi-dwarf and tall varieties should be two to four feet apart.

Some sow the seed in double rows six inches apart, placing trellis or brush between the rows, thus making one row of supports do for two rows of peas.

For succession seed should be sown at intervals of about two weeks until the middle of June. They do not do well in hot weather in summer, but good crops may again be produced in the fall.

On the Pacific Coast, where the winters are mild, the seed may be planted in rather light, porous, well-drained soil in November, as instructed elsewhere for Sweet Peas, and will be ready for use early in June.

Peas are cold weather vegetables and should be planted either very early or rather late. Seed inoculated with Farmogerm produces heaviest yields. The early dwarf sorts need no support but the tall varieties should be trellised. All varieties are helped if fertilized with Morcrop.

Prices All Varieties

Pkt., 15c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.00

Early Varieties

WASHINGTON WONDER—16 inches, yields abundantly well filled pods of six to nine wrinkled peas, good size, fine flavor.

LITTLE GEM—18 inches, vines are robust and branching, pods three inches long, peas medium size, wrinkled.

AMERICAN WONDER—12 inches, very early, dwarf, compact habit, numerous short pods, well filled.

SUPERB—16 inches, large broad pointed pods with eight or nine peas, very productive and sweet.

LAXTONIAN—18 inches, has six to eight large peas per pod and bears abundantly, sweet and tender.

Peas — Continued

ALASKA—24 inches, earliest of all, smooth seeded, strong, vigorous grower, its lack of flavor is offset by its earliness.

GRADUS OR PROSPERITY—30 inches, has no superior for sweetness and production, pods are numerous and well filled.

THOMAS LAXTON—36 inches, pods have square ends, are numerous and packed with very sweet peas, a popular variety

Late or Maincrop Varieties

TALL TELEPHONE—60 inches, heavy vines well set with large pods; the market gardeners' favorite, rich sugared flavor.

DWARF TELEPHONE—30 inches, late heavy vined pea, bearing large, broad well-filled pods freely, best quality.

ALDERMAN—60 inches, the flavor of the large peas is very fine; this sort is a favorite with canners, yields heavily.

PRIZEWINNER—36 inches, curved pointed, well-filled pods, exceptionally fine flavor and very tender.

Sugar or Edible Pod Varieties

SWEDISH SUGAR—70 to 80 inches, pods are large, very sweet and sugary, useful both as pod and shell peas.

DWARF GRAY SUGAR—24 inches, pods are very delicious when cooked the same as wax beans.

Pepper

1 oz. for 1500 plants. 3 oz. plants an acre.

Strictly a hot climate vegetable and not well adapted to the Coast section of the Northwest. Plants are started in hotbeds and transplanted after the weather has settled. Frequent cultivation, plenty of moisture, liberal applications of Morcrop Fertilizer are great factors in their successful culture.

CHINESE GIANT—Mammoth size, splendid shape, glossy red fruits, bears continuously.

Pkt., 10c; Oz., 80c; ¼ lb., $2.50; Lb., $8.00

Prices All Following Varieties

Pkt., 10c; Oz., 70c; ¼ lb., $2.00; Lb., $6.00

BELL OR BULL NOSE—Plants are vigorous, fruits large, thick mild flesh of fine quality, bright crimson.

LONG RED CAYENNE—Hot and pungent, slender twisted pods, medium early bright red when ripe.

PIMENTO—Very mild with thick flesh of peculiar delicate flavor, prolific, good shipper.

RUBY KING—Large, bright red fruits with pleasant and mild flavor, best for slicing.

Potato

1 lb. for 12-15 feet of row. 700-900 lbs. per acre.

A rich, sandy loam is best suited to the production of Irish Potatoes, and the Morcrop Fertilizers employed should contain high percentages of potash. The main crop of Irish Potatoes for family use should be grown elsewhere, but a small area of early ones properly belongs to the garden. The preparation of the soil should be the same as for general garden crops.

Early potatoes should be planted as early in the spring as it is feasible to work the land. Late potatoes should be planted late in May or during June. The rows should be two and one-half to three feet apart, and the hills fourteen to eighteen inches apart in the row.

Lay off the rows with a one-horse plow or lister, and drop the seed, one in a place, in the bottom of the furrow. Cover the seed to a depth of about four inches, using a hoe or one-horse plow for the purpose.

One to three weeks will be required for the potatoes to come up, depending entirely upon the temperature of the soil. The ground may freeze slightly after the planting has been done, but so long as the frost does not reach the seed potatoes no harm will result, and growth will begin as soon as the soil becomes sufficiently warm.

As soon as the potatoes appear above the ground and the rows can be followed, the surface soil should be well stirred by means of one of the harrow-toothed cultivators. Good cultivation should be maintained throughout the growing season, with occasional hand hoeing, if necessary, to keep the ground free from weeds. Towards the last the soil may be well worked up around the plants to hold them erect and protect the tubers from the sun after the vines begin to die.

After digging the potatoes they should not be allowed to lie exposed to the sun or to any light while in storage, as they will soon become green and unfit for table use. Early potatoes especially should not be stored in a damp place during the heated period of the summer, and will keep best if covered with straw in a cool, shady shed until the autumn weather sets in after which they can be placed in a dry cellar or buried in the open ground.

The ideal temperature for keeping Irish Potatoes is between thirty-six and forty degrees F., but they will not withstand any freezing.

Price based on market at planting time. Send for special price list.

EARLY ROSE—Long, with pink skin, deep eyes, meat splashed rose, early and prolific.

EARLIEST OF ALL—Round, smooth white skin, deep eyes, very early and especially fine flavored.

BEAUTY OF HEBRON—Long flattened shape, large, pink skin, medium early.

AMERICAN WONDER—Long, white skinned, medium size, shallow eyes.

IRISH COBBLER—Oblong flattened shape, quite early and very prolific, white.

GOLD COIN—Oblong, rather flat, shallow eyes, cream skin, fine baker and late keeper.

NETTED GEM—Long, shallow eyes, heavily netted skin, fine flavor, favorite market sort.

BURBANK—Large long tubers, heavy yielder, keeps well, has good flavor.

PRIDE OF MULTNOMAH—Large, deep eyed, long tubers, skin white and smooth, prolific.

OTHER VARIETIES—We can generally furnish any popular variety on order. It is better, however, to specify second choice when ordering seed potatoes, as the demand is uncertain and your first choice may be sold out.

Pumpkin

1 oz. for 30-40 hills. 4 lbs. for an acre.

Pumpkins are very easy crops to grow provided they are given warm, rich soil. They require quite a long season and should be planted as early as frost danger is past. Sandy loams are preferred. Plant in hills eight to ten feet apart each way and allow only three or four plants to remain in a hill. Because of their spreading habit Pumpkins are generally planted in patches or fields of corn or potatoes where the vines can grow undisturbed.

JUMBO OR KING OF MAMMOTHS—The largest grown, skin salmon orange, meat very thick.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

Use **MORCROP** Fertilizer

Prices Following Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., $1.00

SUGAR OR SWEET PIE—Medium size, very sweet, prolific, meat thick and yellow.

CONNECTICUT FIELD—Large productive field pumpkin, very good for pies.

LARGE CHEESE—Large, abundant fruiting sort, thick meat, suitable for canners.

Radish

1 oz. for 100 feet of row. 8-10 lbs. plants an acre.

This is a hardy, quick-growing crop, and the seed may be sown as soon as the ground can be worked properly in early spring and for succession at intervals of ten days or two weeks as long as wanted. The soil should be very rich, light and warm. To make them crisp and brittle they must be grown quickly. It is well, therefore, to make a heavy application of Morcrop on the early sorts, a little nitrate of soda will be very beneficial.

The seed may be sown in drills a foot apart and the plants thinned to about two inches, or the seed may be mixed with seeds of slower growing crops such as lettuce, carrots, parsnips, etc., and the radishes will be used before the other crops need the space.

Winter radishes are grown the same as turnips, and the seed should be sown in the latter part of July or any time in August.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 40c; Lb., $1.10

LILLY'S EARLIEST OF ALL—Superior, extra early, turnip shaped, mild, crisp and tender.

EARLY SCARLET TURNIP WHITE TIP—Small scarlet radishes with white tip, very early.

EARLY SCARLET TURNIP—Red, turnip shaped, very early, medium size, quite pungent.

CRIMSON GIANT—Largest of the round, early sorts, flesh white, solid, crisp, mild and tender.

FRENCH BREAKFAST—Olive shaped, splendid flavor, quick growing, desirable for forcing.

HALF LONG DEEP SCARLET—Flesh crisp, juicy and pungent, forces well, quite early.

More Radish listed on page 20.

Radish—Continued

LONG BRIGHT SCARLET — Roots smooth, uniform and long, fast growing, mild flavor.

WHITE ICICLE—Long thick roots, small tops, early, flesh sweet and tender.

ROUND BLACK SPANISH—Flesh snow white, firm and pungent, roots round but large.

CHINA ROSE WINTER—Long, tapering, smooth roots, flesh white, mild flavored, keeps well.

Rhubarb

1 oz. for 150 feet of row. 6 oz. makes plants for an acre.

Although the crop is so easily produced and so certain and regular after the roots are established, a large number of home gardens are still without it. Everyone relishes rhubarb pie early in the spring, and this plant gives the first available material for pies.

When started from seed they should be planted like carrots and transplanted the following fall. Generally started by divisions of old roots, thereby, saving one or two years. Thrive best in light soil which should be very rich and full of humus or vegetable matter. Rhubarb can be forced during the winter in the cellar without heat by planting in boxes of rich soil. Earlier and better rhubarb can be grown outdoors if the light is excluded by covering with an inverted barrel or box.

MAMMOTH VICTORIA—It is vigorous and very productive of thick, red stalks of fine quality, juicy and rich.

Pkt., 10c; Oz., 25c; ¼ lb., 65c; Lb., $2.00

Rutabaga

1 oz. for 400 feet of row. 1-2 lbs. plants an acre.

The culture of the rutabaga is the same as for the turnip, except that it requires more room and a longer period for growth. The roots are quite hardy and will withstand considerable frost. They are used for the table like turnips, and are valuable for stock food.

LILLY'S KING OF SWEDES—Large, productive, oval shaped, flesh rich yellow, splendid keeper.

AMERICAN PURPLE TOP—Popular for table use and stock, flesh yellow, solid and sweet.

BANGHOLM—Very large, flesh mild, firm and sweet, color yellow, texture fine.

Price All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 75c

Salsify

1 oz. for 120 feet of row. 8-10 lbs. plants an acre.

This plant requires a full season to reach maturity. Thin to 3 inches apart in the rows and keep the soil well worked. The roots should reach a foot in length and 1½ to 2 inches in diameter at the top.

A light, mellow, well fertilized soil that has been worked deeply is best. The culture is similar to other root crops and the matured vegetables can be left in the ground and dug as required for winter use. Should be more generally grown as it can be used in many ways. Boiled and diced, rolled in cracker dust and fried in butter gives it a decided flavor of fried oysters.

MAMMOTH OR SANDWICH ISLAND—This is the most popular variety, growing twice the size of any other. Mild and delicately flavored.

Pkt., 10c; Oz., 35c; ¼ lb., $1.00; Lb., $3.00

Spinach

1 oz. for 100 feet of row. 10-12 lbs. for an acre.

Spinach is easy to grow, thrives in cool weather, and is valuable for greens during the winter and early spring.

Spinach is grown both as a fall and spring crop. Fall crops are sown in August and September and the spring crop either in November or early spring. During growing weather approximately eight weeks are required to grow the crop. Fertilize liberally with Morcrop before planting the seed as much of the satisfaction in growing spinach is derived from crops that grow quickly to a large size.

For spring and summer use, sow in drills one foot apart very early in spring and at intervals of two weeks for succession.

For winter and early spring use, sow in November after other crops have been removed from the ground. Mulch with straw on the approach of very cold weather.

The soil should be light and rich. In gathering spinach the entire plant is removed rather than merely cutting off the leaves. If not sown too thickly, the only thinning necessary will be to use the larger plants first, giving the smaller plants room to develop.

KING OF DENMARK—A desirable new variety, stands two weeks before running to seed, plants vigorous, leaves large, round and quite crumpled.

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 75c

Prices Following Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 50c

MAMMOTH VICTORIA — Early, long standing, large thick leaves, suitable for fall or spring planting, thrives even in hot weather.

BLOOMSDALE SAVOYED—Very early, hardy, leaves large, round and thick, very much savoyed.

THICK LEAVED IMPROVED—Leaves large, crumpled and thick, slow to run to seed, very hardy.

PRICKLY WINTER — Large, smooth, three-cornered leaves, the standard sort for fall planting.

LONG STANDING—Late maturing, remains in condition longer than most sorts, large plants.

Squash

Bush Varieties— 1 oz. for 30-40 hills. 4-6 lbs. for an acre.

Vining Varieties—1 oz. for 10-15 hills. 3-4 lbs. for an acre.

The early summer varieties of squash do well in all sections of the Northwest, and if given proper care the winter varieties may also be grown in even the most unfavored sections. Where the season is short they may be started by the same method as described for musk melons. They require a warm, fertile soil, preferably sand, well-rotted compost or Morcrop Fertilizer should be mixed with the soil around the hills as squash are gross feeders. The bush varieties of summer squash are grown almost exclusively now, and these should be planted in hills about four feet apart. Winter varieties, such as the Hubbard, should be planted in hills 12 feet each way, for the Hubbard and other long trailing kinds use the same treatment as described for the pumpkin, and no trouble will be had in getting the squash to mature in any section of the Northwest. Care should be used to see that the squash are all picked and stored before the first fall frost, as they are very easily injured. In gathering the winter varieties care should be exercised that the stem is not broken from the squash, and that the fruit is not bruised.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 40c; Lb., $1.25

Bush Varieties

WHITE BUSH SCALLOP—Very early round, flattened, scalloped edge, fruits waxy white.

EARLY SUMMER CROOKNECK—Early, deep yellow in color, true crookneck form, densely warted.

DELICATA—An early hybrid, producing fruits varied in form and color, but deliciously flavored.

Vining Varieties

HUBBARD—Large, dark green, densely warted, thick yellow meated fruits, vigorous vines.

MAMMOTH CHILI—The largest of the squashes, orange-colored, oblong, smooth, deep meated fruits.

SIBLEY OR PIKES PEAK—Smooth-shelled, pale green fruits, meat deep orange colored, fine flavored.

GOLDEN HUBBARD—Orange red, moderately warted shell, good keeper, deep meated, early maturing.

BANANA—Average length 2 feet, deep firm flesh, yellow shell, keeps well, used as a marrow when young.

Marrow Squashes

ENGLISH VEGETABLE MARROW—Oblong, creamy white fruits, used when young either boiled or fried like egg plant.

BOSTON MARROW—Large oval fruits, flesh salmon yellow, fine texture and flavor.

Swiss Chard

1 oz. for 100 feet of row. 4 lbs. plants an acre.

Swiss Chard is a beet grown for its leaves, which are large, tender succulent, and highly esteemed as "Greens" on account of their agreeable flavor. The leaves are boiled like spinach, the stem or midrib can be removed before cooking and only the best leaves should be used as new leaves appear after picking. Culture is the same as for table beets.

GIANT LUCULLUS — Large savoyed leaves, thick fleshy stalks.

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., $1.00

Tobacco

A packet for 1,000 plants.

Tobacco can be grown in the warmer sections of the Northwest. The plants should be started early in spring in hotbed or cold frame and transplanted to the open ground when the weather has become thoroughly settled and warm. Wood ashes should be mixed with the soil, and the plants set four feet apart each way. Cultivation is the same as for corn. Fertilize liberally.

It requires 60 days or longer to produce plants, the seed germinates very slowly. In Tobacco sections, seeds are planted in the ashes where brush has been burned, as weeds do not start readily in such places.

Prices All Varieties

Pkt., 10c; Oz., 75c; ¼ lb., $2.50

CONNECTICUT SEED LEAF—Hardy, vigorous, large leaved, suitable for the Northwest.

HAVANA—Medium sized leaves, very thin and of fine texture.

Tomato

1 oz. for 3,000-4,500 plants.

Since its exceptional food values have been established, there has been an ever-increasing demand for the tomato. It is a universal favorite, either as a canned or fresh vegetable. The old traditions of its unwholesomeness have been swept aside completely and it is recognized as one of our richest vitamine foods, adapted not only to adults, but to youngsters and even infants.

The plants should be started in a greenhouse, hotbed, or in a warm, light room in February or early in March, and transplanted once or twice before being set outdoors. The best plants are produced by transplanting single plants to pots or berry boxes.

They cannot stand any cold, and should not be set outdoors until the weather is thoughly warm. The soil should be rich, mellow, and in fine condition. If the plants are not to be pruned they should be set four feet apart each way. They may be set in rows with early maturing crops that will be out of the way before the tomatoes need the room.

West of the Cascade Mountains, where the climate is cool, they must be favored in every way possible. Set the plants two feet apart in rows four feet apart. Prune the plant to a single stem and keep all side shoots and other superfluous growth off, and train the plant to a stake set at each plant. Or set the plants four feet apart, set a stake at each plant and stretch wires along the row of stakes, one twelve inches from the ground and the other thirty inches from the ground. This will form a trellis for the plants which should be pruned to four stems, which should be trained on the wires.

Pruning increases the size of the fruits, and also permits the sunlight to reach the blossom and fruits, thus promoting a much earlier crop.

There are three varieties that are well adapted to west of the Cascade Mountains —they are "Lilly's Puget Sound Special," "Sparks Earliana," and "Lilly's Puget Sound Forcing."

Large Fruited Varieties

LILLY'S Puget Sound SPECIAL—Most dependable west of the Cascades, smooth, medium sized fruits, flesh solid, meaty, coreless and rich red colored.

SPARKS EARLIANA—One of the earliest, fruit borne in clusters, smooth, uniform size and solid.

BONNY BEST—Fruits in clusters, ripens uniformly, solid and smooth, early, productive.

NEW STONE—Late, very large, solid, smooth oval shaped fruits, excellent for shipping.

JOHN BAER—Early, very productive, bright red fruits that are round, smooth and solid.

CHALK'S EARLY JEWEL—Exceptionally fine, early, uniform, round, smooth, scarlet fruits.

Prices All Above Varieties

Pkt., 10c; Oz., 50c; ¼ lb., $1.50; Lb., $4.50

LIVINGSTON'S CORELESS — Medium late, large, globe shaped, coreless, flesh heavy and bright red.

Pkt., 10c; Oz., 75c; ¼ lb., $2.25; Lb., $6.50

LILLY'S Puget Sound FORCING — The fruits are close, stem smooth, early, firm and meaty, very prolific.

Pkt., 10c; Oz., 75c; ¼ lb., $2.25; Lb., $6.50

DWARF CHAMPION—Dwarf, compact habit, early, vigorous and productive, medium size.

Pkt., 10c; Oz., 75c; ¼ lb., $2.25; Lb., $6.50

Two books you should have

LILLY'S MORCROP MANUAL

LILLY'S SUPPLY BOOK

Both mailed free if you are interested.

Prices All Following Varieties

Pkt., 10c; Oz., 85c; ¼ lb., $2.50; Lb., $7.00

PONDEROSA—Massive size, good form, smooth, solid, almost seedless, a delicious flavor.

Small Fruited Varieties

GOLDEN HUSK OR GROUND CHERRY—The numerous small fruits are enclosed in husks, sweet flavored, fine for preserves.

RED CHERRY—Small, perfectly round, bright red fruits, used for pickles, etc.

RED PEAR—The small pear shaped bright red fruits are used for preserves and "tomato figs."

YELLOW PEAR—Similar to red pear in shape and size but of clear yellow color.

YELLOW PLUM—Large clusters of small plum shaped fruits; very fine flavors.

Turnip

1 oz. for 400 feet of row. 2-4 lbs. plants an acre.

Turnips may be grown in any good garden soil, but do best in rich, light, sandy soil. For table use, the early varieties should be sown as soon as the ground is in good condition to work in spring in drills twelve to fifteen inches apart; the plants should be thinned to three inches apart in the rows. For succession, sow at intervals of about three weeks. Turnips should be used for table while young, before they are full grown. They may be grown during the summer but do best in cool weather in spring and fall.

For fall and winter use, the seed should be sown in August or September. For stock food, the seed is sometimes sown broadcast in the field after last cultivation of corn or other cultivated crops.

Turnips are quite hardy and need not be harvested until after several frosts. West of the Cascade Mountains they are sometimes left in the ground until wanted for use during the winter. They may be stored in a cellar or buried in a pit.

Prices All Varieties, Except as Noted

Pkt., 10c; Oz., 20c; ¼ lb., 45c; Lb., $1.25

SNOWBALL—Very early, small globe-shaped, smooth, thin skinned, flesh white, crisp and sweet.

EARLY WHITE MILAN—Very early, medium size, fine grained, tender, mild, sweet flavored.

PETROWSKI—Medium size, smooth skin, and flesh yellow, top short and spreading, flesh crisp, tender and very pleasant; keeps well.

Prices Following Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 75c

PURPLE TOP WHITE GLOBE—Early, globe-shaped, medium sized, yields heavily and keeps good.

PURPLE TOP STRAP LEAVED—Roots flat, medium size, flesh white, fine grained and tender.

GOLDEN BALL OR ORANGE JELLY—Delicious flavored, smooth, round, yellow flesh and skin.

YELLOW ABERDEEN—Large, late, sweet, yellow fleshed, long keeper and very productive.

COWHORN—Long, crooked shaped, white, fine grained, quick growing stock turnip.

Flower Gardening

Among the choicest flowers scattered over the earth are some whose lives are short. They sprout from seed, grow, flower and produce seed in their turn—and then die, all within the limits of a single season of our gardening year. These are annuals. The very aim of their existence is seed production, and if it were not for our watchful care, many of the sorts would exhaust themselves early in the season. The more flowers we pluck the more they bloom. This is the great charm of annuals. They may always be depended upon to give a splendid showing the year they are sown.

Plants which live year after year in the garden are known as perennials. The progressive garden lover should, each year, add some of the best kinds to his garden. Someone has truly written that the most beautiful gardens are in the mind, not in the soil. The flowers in your own garden are always more interesting than those in the gardens of another. They are the results of your labor; there is the enjoyment of ownership; they are your flowers.

"Nothing without labor" is the motto of the garden, although it is true that some perennials require but little care. He who loves the garden enough does not think of the labor but of the pleasure, he remembers only the triumph of having lusty, flowering plants. He prepares his soil properly, realizing that the camouflage of having a good surface soil, but a poor soil beneath, fools persons but not plants. He talks little about the bugs; he sprays them.

Flowers often make the difference between a habitation and a home, and it is surprising that there are so many unattractive habitations when so little expense and labor would transform them into real homes. It is so much easier to be cheerful among pleasing surroundings. Many of the prettiest and most satisfactory flowering plants are easily grown from seed, and are especially pleasing when tastefully arranged with regard to color, height, season of blooming, and to harmonize with surroundings.

There are no more satisfactory flowers than those grown from seed, especially the easily grown and brilliant flowered annuals. The beautiful shrubs and lilies, of course, have their place, but are far more expensive than a paper of seed which will furnish a large number of plants with usually enough for one's garden and some to spare.

The seed bed for flowers should be carefully prepared. The soil should be rich, consisting of a good proportion of sand and leaf mold, and should be very finely pulverized. The smaller seeds should be covered very lightly by sifting fine dirt over them, just enough to hide them. Water should be applied in a fine spray, and not too much of it. Most plants are best started under glass or in the house and transplanted when large enough.

Some of the most satisfactory flowering annuals may be grown practically the same as garden vegetables, but others, although not difficult to grow require different treatment. Most of the failures in growing flowering plants from seeds are on account of a lack of knowledge of the habits of the different plants. If the following directions are followed closely success will be the rule.

For starting plants indoors a greenhouse or hotbed is best, but they may be started very satisfactorily in shallow boxes or earthenware seed pans in a window in a reasonably warm room in the house.

In the bottom of the box, or flat, which should be only two or three inches deep, should be placed an inch of broken pots or other coarse material to insure perfect drainage. The box should then be filled to within about a half-inch of the top with finely sifted soil consisting preferably of equal parts of sand, leaf mold and light garden loam. Fertilizer should not be used until the plants are transplanted.

The soil should be pressed down firmly and evenly and watered thoroughly the day before the seed is to be sown. Sow the seed thinly on the surface, and cover with finely sifted soil pressed down firmly. Very small seeds should be barely covered; larger seeds may be covered to a depth of about one-eighth of an inch. Many failures are on account of covering seeds too deeply.

Cover with a pane of glass or sheet of paper, to prevent too rapid evaporation of moisture, and keep in a temperature of as nearly sixty to seventy degrees as possible.

Watering is of the utmost importance. The soil must not become dry, and it is fully as important that it should not be too wet. It is best done with a fine spray.

Remove the covering after the seeds have germinated. When the plants are large enough to handle they should be transplanted into similarly prepared boxes, an inch or more apart each way, or into small pots, to be kept until time to plant outdoors. The soil should be rich, and may be fertilized with well-rotted manure or commercial fertilizer.

The plants should have an abundance of air, and should be gradually hardened off before they are set outdoors.

Flower Seeds

You are safe in buying Vegetable and Flower Seed Packets from the LILLY SEED DISPLAY CASE IN YOUR DEALER'S STORE. Rest assured that the varieties are adapted to culture in the Northwest and that the seeds are of high germination and purity. It has taken us almost 40 years to establish our present enviable business reputation and we stake it all on the quality of Lilly's Seeds.

Abronia

Sand Verbena

A rapid growing, trailing annual which is excellent for growing in baskets, the rockery, or the open border. The trailing stems often reach a length of 3 to 5 feet. They throw up numerous flower-spikes throughout the summer and fall. The blooms are borne in clusters not unlike Verbenas. They are of an attractive, bright rosy lilac color with white centers, quite fragrant and the seed is best sown in the open after all danger from frost is passed. It delights in a dry, poor soil and sunny situations.

No. 1170. ABRONIA—Mixed colors.
Pkt., 10c; ¼ Oz., 50c

Adonis

Pheasant's Eye

It would be difficult to find a bright flowered annual that blooms earlier than does Adonis. Flowers are bright colored, resembling large Buttercups with finely cut ornamental foliage. Grows about a foot high and is especially suitable for rock gardens and borders. Any good light soil will do and they grow either in shade or sun, partial shade being preferred. Develops rather slowly from seed and does not like to be moved.

Sow seed outdoors where the plants are to remain in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Thin to stand 10 to 12 inches apart.

No. 1171. ADONIS—Mixed colors.
Pkt., 10c; ¼ Oz., 50c

Ageratum

Floss Flower

Hardy annual growing from 6 to 10 inches high. Sow seed in hot-bed during February or March, and transplant for borders when all danger from frost is past, setting plants four to six inches apart.

Keep the faded flowers picked, otherwise the plants will stop flowering and the clear blue effect will be marred. When sown in open ground wait until the soil is good and warm, in this case the plants do not reach their full splendor until towards fall.

Ageratum prefers rich, light soil and not much shade, and when conditions are right will continue to bloom from 10 to 15 weeks.

No. 101. AGERATUM, MEXICANUM—Mixed. About eight inches high, of free branching habit.
Pkt., 10c; ¼ Oz., 30c

No. 439. AGERATUM, LITTLE DORRIT—The plant is six inches tall and a foot wide and is a perfect mass of blue flowers all summer.
Pkt., 10c; ¼ Oz., 25c

Full instructions for culture are to be found on each packet of flower seed.

Alyssum

Sweet Alyssum

Unexcelled for borders, beds, baskets, pots, rockeries, and for cutting. It is a hardy annual, and is covered with spikes of small white flowers during the summer and fall. It may also be grown in pots in the house during winter, where the exquisite fragrance is very pleasing.

Sow seed outdoors in the fall or in February under cover and transplant in April, or the seed may be sown where plants are to remain as soon as the soil can be worked. A light brown soil is best and by trimming back the plants a little when first blooms begin to wither, they will continue to bloom until killed by frost.

No. 2. ALYSSUM, BENTHAMI—White, grows 8 to 10 inches tall.

Pkt., 10c; ½ Oz., 25c

No. 1199. ALYSSUM, LITTLE GEM—White, grows 4 to 5 inches tall. One of the finest for low beds and borders.

Pkt., 10c; ¼ Oz., 25c

Amaranthus

Love-Lies-Bleeding

This (annual) variety of Amaranthus has long drooping spikes of blood red flowers resembling heavy chenile. The plant reaches the height of 5 to 6 feet. They will grow best in the hottest locations. The soil should not be very rich as the colors are more brilliant when grown on poor soil and the foliage does not out-do the flowers. Sow seed outdoors as soon as the ground gets warm in the spring or start the plants indoors in February and transplant, setting the plants 4 to 5 feet apart as they require much space.

No. 1173. AMARANTHUS (Love-Lies-Bleeding)—Red.

Pkt., 10c; ¼ Oz., 30c

No. 1172. AMARANTHUS (Tricolor).

The foliage is beautifully marked with rich scarlet, yellow, green and white. Amaranthus is the most stunning of all variegated leaved plants. They grow to a height of 2 to 3 feet. Plants should stand about 2 feet apart.

Pkt., 10c; ¼ Oz., 30c

Anemone

Wind Flower

The Poppy Anemones are very pleasing hardy plants for the herbaceous border. Fine, large flowers; few plants compare with them in beauty. Excellent for bouquets and table decorations. Blooms in May and June; colors are mixed white, red, pink, etc., with bright colored centers.

Hardy perennial, grows from 6 to 10 inches in height. The blooms come in a great variety of colors and resemble, somewhat, the single poppy in shape. Blooms measure about 2 to 3 inches across.

They make a beautiful display when planted in beds or borders and are excellent for bouquets and table decorations. Seed should be sown in a light shady loam any time from April to August for next spring's bloom.

No. 1174. ANEMONE—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

Antirrhinum

Snapdragon

This is a valuable border plant, and although it is a perennial, it may be treated as an annual in the Northwest, blooming the first season from seed. The bright colors and peculiar form of the flowers are attractive and the spikes are useful for cutting, as they keep fresh a long time. Seed may be sown in the open ground in March or April, and the plants will bloom in August, but for early bloom, the seed should be sown in the fall outdoors or in the hot-bed in February or March, and the plants transplanted

into beds of warm, dry rich soil early in April or May. Whole masses of Snapdragons are appealing, but individual plants have a charm which we cannot resist. As cut flowers they are very adaptable. During winter they should be protected with a light mulch, and will bloom early the next spring. Grow from 1 to 3 feet high. They succeed best in a rather light soil in a sunny location.

No. 921. ANTIRRHINUM, BLACK PRINCE—Dark crimson flowers and very dark foliage. Grows about eighteen inches high.

Pkt., 10c; ¼ Oz., 50c

No. 1073. ANTIRRHINUM, GOLDEN KING—A splendid yellow Snapdragon; three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1074. ANTIRRHINUM, DELICATA—A beautiful pink; three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1075. ANTIRRHINUM, APPLE BLOSSOM—A charming pink shade on a white ground, with a white throat. Three feet.

Pkt., 10c; ¼ Oz., 50c

No. 1076. ANTIRRHINUM, BRILLIANT SCARLET—A very effective red. Three feet high.

Pkt., 10c; ¼ Oz., 50c

No. 1201. ANTIRRHINUM, QUEEN VICTORIA—Pure snow white. Three feet tall.

Pkt., 10c; ¼ Oz., 50c

No. 1202. ANTIRRHINUM, BRONZE—Brownish orange and copper-red shades. Three feet.

Pkt., 10c; ¼ Oz., 50c

No. 104. ANTIRRHINUM, DWARF, MIXED—Best of the dwarf varieties, all colors mixed. Grows about eight inches high.

Pkt., 10c; ¼ Oz., 50c

No. 4. ANTIRRHINUM, TALL, MIXED—A mixture of good tall varieties, growing three feet high. All colors.

Pkt., 10c; ½ Oz., 75c

When setting the plants outdoors they should be allowed plenty of room, and the soil and location should be suitable for that particular species. To get pleasing and artistic results they should be placed with regard to height, color and time of blooming to harmonize with other plants, shrubs and surroundings. There is unlimited opportunity for display of taste, and in this lies one of the greatest pleasures of gardening.

Arabis

Rock Cress

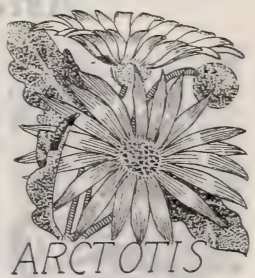
A hardy perennial and one of the earliest and prettiest spring. It withstands spreading tufts are covered with a sheet of pure white flowers very early in spring. It withstands drought, and is unequalled for rockeries and edging. Grows six inches high and a foot or more in diameter. Sow the seed in fall or spring, preferably in seed bed, to be transplanted when wanted. May be propagated by division of plants or by cuttings.

No. 1035. ARABIS ALPINA—White.

Pkt., 10c; ¼ Oz., 25c

Arctotis

African Daisy



This annual is easily grown from seed, each plant quickly forms a bush two feet across, with silvery white, deeply cut foliage. The daisy-like flowers measure 2½ inches across. They are silvery white with a sky-blue eye surrounded by a narrow yellow zone. The under part of the petal is lilac-blue. Borne on long stems above the foliage. The flowers are excellent for cutting as the stems are 10 to 12 inches long. Cut blooms last a week, closing each night and even some undeveloped buds will open in water. Plants grow to a height of two feet. Sow the seeds either in the open ground as soon as the ground is warm or start the plants indoors in February. The seed germinates rapidly and the bloom period lasts from July until frost. Plants should stand 12 to 18 inches apart.

No. 1136. ARCTOTIS GRANDIS—White, shaded blue.

Pkt., 10c; ¼ Oz., 35c

Plant cosmos along the fence and be ready to tie it up when it gets a couple of feet tall. It has the falling habit when the wind hits it later in the season.

Argemone

Prickly Poppy

These prickly-leaved, white and yellow Poppies are very interesting to grow. They are perennials in the south, but are best treated as annuals in the Northwest. They attain a height of three feet and flowers appear early in July and continue to come until frost. Some of the plants have beautifully variegated foliage. The seed should be sown where the plants are to remain as the plants are hard to move successfully. Thin the plants to one foot apart. Plants thrive best in light, rich soil and sunny location. They self sow.

No. 1175. ARGEMONE—Mixed colors.
Pkt., 10c; ¼ Oz., 50c

Aster

The aster is certainly one of the most satisfactory annual flowering plants. The great variety in its size, color, form and season of blooming makes it a most satisfactory plant for supplying cut flowers. In fact, many of the improved sorts produce flowers equal in form and size to some of the better sorts of chrysanthemums. The habit of growth adapts the aster not only to close planting for cut bloom, but some forms are robust, tall-growing plants, well adapted for use in an herbaceous border where late bloom and careless effects are desired. The more compact-growing, large flowered forms are most desirable for cut blooms, while the tall-growing, open types are most useful in wild gardens or for screens. The vigor and ease of culture of the aster are factors which contribute to its popularity. Plants from seed sown in the open ground in May bloom in September and October, when the flowers are seen at their best. For July and August blooms, the seed should be sown in March in cold frame or in pots or boxes in the house. Cover the seeds lightly with deep, rich, light soil and when the plants have three or four leaves, transplant to other boxes or pots, setting the plants about two inches apart. After all danger of frost is past transplant to the permanent bed, setting them twelve to eighteen inches apart, according to variety. Morcrop fertilizers are best. They require rich, well prepared soil and plenty of water.

Points to remember:

Do not keep the seed bed too damp.

Checking the growth causes poor blooms and rust.

Shading plants when young prevents injury from bugs.

If plants become badly diseased, burn them.

Lilly's Crego Giant are the finest and largest of all Comet Asters. The flowers are immense, often five inches in diameter, and are composed of long, wavy, twisted petals gracefully formed into loose, yet densely double, half globes, equaling some of the finer Chrysanthemums.

The plants are of luxuriant, branching growth, two feet tall, and bearing twenty to thirty of these magnificent flowers on very long stems, which gives them added value for cutting. They keep in good condition longer than other varieties.

Crego Giant Aster

Crego Giant Asters

Price, any variety: Pkt., 10c; ¼ Oz., 50c

No. 1012. CREGO GIANT ASTER—White.

No. 1013. CREGO GIANT ASTER—Pink.

No. 1036. CREGO GIANT ASTER—Crimson.

No. 1037. CREGO GIANT ASTER—Lavender.

No. 1077. CREGO GIANT ASTER—Azure Blue.

No. 1078. CREGO GIANT ASTER—Purple.

No. 1079. CREGO GIANT ASTER—Mixed.

Branching Asters

Giant Branching Asters

Lilly's Giant Branching, a beautiful, late flowering variety. The flowers are large, very double, and are borne on long stems. This variety is especially valuable for bedding.

No. 940. GIANT BRANCHING ASTER—White.

No. 941. GIANT BRANCHING ASTER —Pink.

No. 942. GIANT BRANCHING ASTER —Lavender.

No. 1080. GIANT BRANCHING ASTER —Crimson.

No. 939. GIANT BRANCHING ASTER —Mixed.

LILLY'S Mixed ASTERS—A fine mixture of many of the best varieties of annual Asters, producing a great variety of splendid forms and colors.

No. 900. ASTERS—Mixed colors.

Balsam

Lady Slipper

A native of India, the garden balsam loves a hot sun, rich soil and plenty of water. The young plants are quick, sure growers and from seed sown in the open ground in May soon form handsome bushes thickly massed with large, rose-like flowers. Transplanting two or three times has a tendency to dwarf the plants into better shape and make the flowers more double. They should be given plenty of space to develop, and should not be planted closer than twelve to eighteen inches each way. The flowers are produced on the under side of the leaves or inside the plants and show to the best advantage when planted in the margin of groups or to crown a terrace. For early bloom the seed should be sown in March in a gentle hotbed or in the house, and when large enough transplanted to other boxes or pots, and to the permanent bed when danger of frost is past. An abundance of sunlight and water is required.

No. 141. DOUBLE BALSAM — Mixed colors.

Pkt., 10c; ¼ Oz., 25c

In transplanting the seedlings grown from a packet of mixed annuals do not make the mistake of selecting only the largest plants lest you, in that manner, select only one color from the mixture. Some varieties in the mixture are bound to be hardier and thriftier than others. Often the sorts slow to start are later productive of the choicest blooms. Also many times the rank growing seedlings do not flower freely.

Bellis

English Daisy

A favorite half-hardy perennial border plant much used for edgings, borders, and rock works. Pretty double flowers in white, pink and red are produced lavishly from early spring until well into the summer. They bloom the first year from seed and best results are obtained by growing new plants each year. Plants may be started indoors in February or March, or the seed may be sown in seed bed or permanent bed early in spring, but it is best to sow the seed in September and seed should be lightly covered with fine soil, well pressed down. Plants should be given some protection in the way of a light covering of straw during winter. They thrive best in a moist soil and cool atmosphere. The plants should be set about six inches apart.

No. 13. BELLIS PERENNIS — Mixed colors.

Pkt., 10c; ¼ Oz., 45c

Blue Lace Flower

(Didiscus)

This annual flower is better for cutting than for garden decoration as the plants are not particularly showy. Arranged indoors with small foliage the blooms display their charms to advantage. The flower heads are made up of small, azure blue flowers produced in umbels like those of the Wild Carrot. The stems are hairy and about 2 feet in length. July and August is the time of bloom. Sow the seed outdoors in the fall or early spring, or indoors early in February and give each plant at least a foot of space when transplanting to the garden.

No. 1184. BLUE LACE FLOWER — Azure Blue.

Pkt., 10c; ¼ Oz., 50c

Order your seeds early if you want to be sure of getting the best varieties. Often they sell out early.

Cacalia

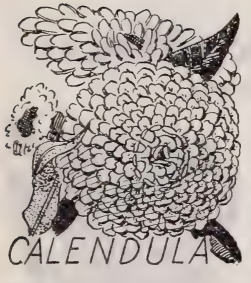
Tassel Flower

This brilliant orange-scarlet flowered annual is worthy of a place in any garden. It is not large, but the dash of color it provides is noticeable. It is much admired in mixed bouquets. The flowers are actually like tassels borne on long stems. Culture is simple. Sow the seeds outdoors in the fall or early in the spring and thin the plants to stand four to six inches apart. Sometimes catalogued and known as Emilia or Flora's Paint Brush. Plants remain in bloom from early summer until autumn. Fine for cutting. Height 1½ feet.

No. 1176. CACALIA—Orange scarlet.
Pkt., 10c; ¼ Oz., 50c

Calendula

Pot Marigold



A hardy annual, about a foot high, blooming freely and earlier than the marigold. The coloring of the large showy flowers ranges through all the shades of yellow from ivory to deep orange. Should be planted eight to ten inches apart in masses or borders. A moderately rich, light soil is most congenial to these plants, but they will thrive in poorer soil than almost any other plant. The seed may be sown in the open ground in the fall and early in spring and will bloom continuously from early summer to late in the fall. Keep the faded flowers picked off if continued bloom is wanted. They self-sow. Height of plant, 1 to 2 feet.

No. 1200. CALENDULA, ORANGE KING—Glowing orange in color, peony-like petals.
Pkt., 10c; ½ Oz., 30c

No. 117. CALENDULA—Mixed colors.
Pkt., 10c; ½ Oz., 25c

Plant Mirabilis for a hedge along a walk. Plant two seeds a foot apart and pull up one plant if both come up.

Calliopsis

One of the showiest and most easily grown of garden annuals, with graceful long stemmed flowers well suited for bouquets. The plants form perfect little bushes about two feet high and are a perfect mass of yellow, maroon and brown flowers from early summer until killed by frost. Prefer sunny spot and sometimes self sow. Clip off seed heads to induce continued bloom. The best flower grown of brownish coloring. Sow in the fall or early spring, give plenty of room.

No. 116. CALLIOPSIS—Mixed colors.
Pkt., 10c; ¼ Oz., 25c

Campanula

Canterbury Bells

These fine old plants are rich in color, profuse in bloom, and of easy culture. For outdoor effects, when planted in quantity, they are glorious, and the finest full-blown specimens can be transplanted to pots for house decoration by soaking the soil about them with water and lifting them with a ball of earth. They are biennials, and bloom the second year from seed, growing about three feet high and bearing a profusion of double and single varieties of bell-shape blue, white, purple and red flowers. The seed should be sown outdoors early in July, and the plants transplanted to cold-frame in October setting them six inches apart. In May they should be transplanted to the permanent bed eighteen inches apart. They like rich soil and good drainage.

No. 15. SINGLE CAMPANULA—Mixed colors. Pkt., 10c; ½ Oz., 45c

No. 157. DOUBLE CAMPANULA—Mixed. Pkt., 10c; ¼ Oz., 30c

No. 1082. SINGLE CAMPANULA—White. Pkt., 10c; ¼ Oz., 25c

No. 1083. SINGLE CAMPANULA—Blue.
Pkt., 10c; ¼ Oz., 25c

No. 1084. SINGLE CAMPANULA—Pink.
Pkt., 10c; ¼ Oz., 25c

Candytuft

(Iberis)

The candytufts are among the best white flowers for edging beds, for planting in belts, beds, or massing for rockeries and for cutting. Several of the varieties are fragrant, and all are profuse bloomers. The seed should be sown outdoors in the fall or during March and April where the plants are to bloom, and well thinned when they have grown about an inch high. Make a second planting a month later, and a third late in July for fall flowers. September sowing will give winter-blooming plants. The soil for best results should be rich, and the plants given an abundance of water. They branch freely, and if some are removed the flowers will be larger. They self sow. Fall sown seed blooms early in June, spring sown in mid-summer.

No. 922. CANDYTUFT, EMPRESS—A grand variety, producing large spikes of bloom resembling a white Hyacinth. The plant is about twelve inches high.

Pkt., 10c; ½ Oz., 25c

No. 39. CANDYTUFT, WHITE ROCKET—Good spikes of pure white flowers, six inches tall.

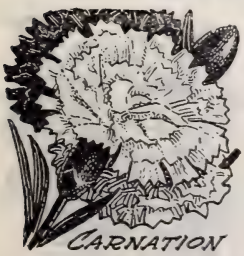
Pkt., 10c; ½ Oz., 25c

No. 1144. CANDYTUFT, UMBELLATA—Mixed colors. All the shades of pinks, reds, purples and white. Very effective. 12 to 20 inches high; good for cutting.

Pkt., 10c; ½ Oz., 35c

Carnation

(Dianthus)



These splendid half-hardy perennials are very satisfactory garden plants west of the Cascade Mountains.

The seed may be sown in hotbed or in boxes in the house early in spring. The plants should be transplanted in small pots when they are large enough to handle, and shifted to larger pots as they grow. They should not be set outdoors until all danger of frost is past. If left outdoors during the winter they must be well protected. The Marguerite Carnations are probably the most satisfactory for outdoor culture, and may be treated as annuals. They require a rich soil and plenty of moisture.

No. 402. MARGUERITE CARNATION—White. Strong growers; free flowering; especially desirable for garden culture.

Pkt., 10c; ¼ Oz., 50c

No. 161. DOUBLE CARNATION GRENADA—A beautiful, early, dwarf variety. Sweet scented, double scarlet flowers.

Pkt., 10c; ¼ Oz., 80c

No. 284. MARGUERITE, CARNATION—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

No. 16. DOUBLE CARNATIONS—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

Celosia

Cockscomb

An odd and picturesque decorative feature of the garden. The dwarf varieties make novel and attractive borders; the tall ones form striking groups. For winter bouquets they are cut before fully ripe, and dried in the house. They are hardy annuals. The seed may be planted in hotbed or in boxes or pots in the house in March or April, and the young plants transplanted to the garden in May, or the seed may be planted in the open ground in May. Transplanting into rich soil about the time the combs begin to form will make the flower heads much larger. The dwarf varieties grow about eight inches high, the tall varieties two feet. They are bright from mid-summer until frost. Colors range from crimson to golden yellow. The heads may be kept in water for weeks when cut. They are often used as everlastings. Give the plants plenty of room; 2 feet is not too much.

No. 17. CELOSIA CRISTATA—Mixed colors. About one foot high, bearing large, highly colored combs.

Pkt., 10c; ¼ Oz., 35c

No. 119. CELOSIA PYRAMIDALIS PLUMOSA—Mixed colors. Large flowered, feathered.

Pkt., 10c; ¼ Oz., 50c

Centaurea

Corn Flower, Bachelor Button, Sweet Sultan

In this are embraced several quite distinct hardy annuals. They are of the easiest culture, grow about eighteen inches high, and are excellent for beds, borders, and cut flowers. The seed may be sown in seed bed or permanent bed either in fall or early spring. The plants should be set about four inches apart. If cut in bud they last 10 days. They prefer cool location and moist soil.

No. 923. CENTAUREA, DWARF VICTORIA—A dwarf, double Bachelor's Button. The plants are only about nine inches high, bear a profusion of large, blue, double flowers, and are excellent for pots and edgings.

Pkt., 10c; ¼ Oz., 35c

No. 1085. CENTAUREA, BLUE EMPEROR—Tall, single Cornflower, growing two feet high.

Pkt., 10c; ¼ Oz., 25c

No. 225. CENTAUREA, CORNFLOWER—The old-fashioned Bachelor's Button. Ragged Sailor, or Bluebottle.

Pkt., 10c; ¼ Oz., 25c

No. 1016. CENTAUREA, GIANT SWEET SULTAN—(Imperialis). The finest of all Sweet Sultans for cutting, lasting a long time in water. Beautiful, artistic, sweet scented flowers borne on long, strong stems.

Pkt., 10c; ¼ Oz., 25c

Chrysanthemum

Annual

The large-flowered types of chrysanthemums, which produce such gorgeous shows in the florists' stores, are not hardy, and must be grown in the greenhouse. The annual chrysanthemums bloom most satisfactorily if the seeds are sown early in a hotbed or cold frame and the young plants transferred to the open as soon as the soil has become sufficiently warm to keep them growing without check. They should be set ten inches apart in their permanent location. Somewhat less satisfactory results can be secured by sowing the seed in the permanent bed early in May, and thinning the young plants to eight inches apart. If the same care in regard to disbudding and pinching back is taken with the annuals as with the large flowered perennials the work will be rewarded by the greatly increased size of the flowers. Bloom profusely throughout the summer months and into the late fall. They like rich soil, plenty of room and pruning.

No. 1058. CHRYSANTHEMUM CORONARIUM—Double mixed colors.

Pkt., 10c; ¼ Oz., 25c

Cineraria

Tender perennial greenhouse and pot plants bearing profusely daisy-like flowers in white, blue, violet and crimson shades. The seed should be sown in flats in a greenhouse in January, merely pressing the seed into the soil and covering very lightly with finely sifted soil. Water with a fine spray. Transplant to small pots when large enough to handle, and shift to larger pots as the plants grow. They may be set outdoors in a shaded position when the weather is thoroughly warm. Water freely. Height, 1 to 2 feet.

No. 19. CINERARIA HYBRIDA—Mixed colors.

Pkt., 10c; ⅛ Oz., $1.25

Clarkia

A pretty, hardy annual, native of the Pacific Coast and consequently blooming in its greatest perfection here. They are useful for bedding, borders, edgings and for hanging baskets. They grow about eighteen inches high, and bear bright rose, purple and white flowers from mid-summer until late fall, in profusion on long, graceful sprays. Seed should

be sown outdoors in the fall or early spring. They thrive best on the sandier soils in either full sun or partial shade. Allow 7 to 9 inches between the plants. Splendid for cut flowers as all the buds open in water. Height, 2 to 2½ feet.

No. 1128. CLARKIA—Single and double, mixed colors.

Pkt., 10c; ¼ Oz., 25c

Columbine

(Aquilegia)

Hardy perennial, very desirable and easily grown, forming large, permanent clumps. Blooms profusely early in the season and remains in bloom until very late. The flowers are exquisitely formed in various colors. Very desirable for borders or for groups among shrubbery. Height, 2 to 3 feet.

Columbines are excellent for rock gardens as well as for the herbaceous border where they make clumps sometimes two feet in diameter. They are somewhat difficult to arrange as cut flowers, but a truly exquisite effect is obtained by placing a single truss of bloom in a vase by itself. Plants can be started by sowing the seed in the open any time between April 1st and the middle of July, and they will bloom profusely the following season. Warm, sandy soil is preferred.

No. 1177. COLUMBINE—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

Cosmos

A favorite, late-flowering annual, especially adapted to the Pacific Coast, growing three to four feet high and bearing bright, bold flowers four inches in diameter. Most effective when planted in masses or background borders. Seed may be started in the house in March, or may be sown in the open ground in May, and the plants thinned to eighteen inches apart. When the plants are about a foot high the tops should be pinched out to induce a bushy growth. They prefer a rather light, not too rich soil, but do well almost anywhere. Keep well when cut.

No. 282. COSMOS—Mixed colors.

Pkt., 10c; ¼ Oz., 75c

No. 1032. COSMOS—White, early flowering. **Pkt., 10c; ¼ Oz., 75c.**

No. 1033. COSMOS—Pink, early flowering. **Pkt., 10c; ¼ Oz., 75c.**

No. 1034. COSMOS—Red, early flowering. **Pkt., 10c; ¼ Oz., 75c.**

No. 1168. COSMOS—Orange, early flowering. **Pkt., 10c; ¼ Oz., 75c.**

Dahlia

Although not generally known Dahlias are easily grown from seed. If planted early indoors and transplanted when danger of frost is past they will bloom the first season and make large bulbs by the next fall.

No. 1203. DAHLIA SEED—All varieties mixed, including many novelties.

Pkt., 10c; ¼ Oz., 50c

Daisy

Shasta Daisy

This splendid hardy perennial grows two to two and one-half feet high and produces an abundance of showy flowers four inches in diameter with pure white petals and yellow centers on long, wiry stems. Blooms abundantly from early summer until frost. A great favorite for borders, masses and cut flowers. Sow the seed in seed bed or cold-frame in fall or early spring. Transplant to permanent bed about six inches apart.

No. 1004. SHASTA DAISY—White yellow center.

Pkt., 10c; ¼ Oz., 35c

Datura

Trumpet Flower

These large-flowered annuals are related to the common Jimson weed. The flowers are trumpet shaped, white, yellow, or purple and sometimes six inches long. The flowers are often much doubled and their fragrance is delightful. They prefer a light soil, a sunny sheltered situation and should be set at least 2 feet apart. Height about 3 feet. Seed can be started indoors early or in the open ground when frost danger is past. Cover seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. Give the plants plenty of room.

No. 1178. DATURA—Mixed colors.
Pkt., 10c; ¼ Oz., 25c

Delphinium

Perennial Larkspur

Beautiful, hardy, border perennials with noble, spikes of handsome flowers; very useful for cut flowers, etc. Sow in the spring or early in fall in seed beds or boxes and transplant when large enough. Delphiniums like plenty of sun. The soil should be rich, deeply prepared, a cool friable loam. Even hot, sandy soils, if watered and fertilized, will produce excellent results, moisture will increase the size of the flowers and spikes. Cultivate the plants constantly with the hoe. Sow out of doors after danger from frost is over, in beds of finely pulverized soil, covering the seed to a depth of not over four times their size, with light soil; press down with a board; thin out as it becomes necessary. Transplant into permanent position as soon as the seedlings are large enough so that they can be thoroughly rooted or established before cold weather, or sow in the early fall, carry the plants over in a cold frame, and transplant to permanent position in the spring.

No. 1129. DELPHINIUM BELLADONNA—A lovely turquoise blue, which is a continuous bloomer. Splendid for cutting. This is the tall Delphinium so often seen in beds and borders and as cut flowers in the florist shops.
Pkt., 10c; ⅛ Oz., 60c

No. 1130. DELPHINIUM BELLAMOSA—A rich deep blue in color and of the same type and habit of growth as the Delphinium Belladonna. The two grow beautifully together.
Pkt., 10c; ⅛ Oz., 60c

No. 1057. DELPHINIUM — Perennial mixed colors.
Pkt., 10c; ¼ Oz., 50c

Digitalis

Foxglove

The tall flowerstem of the Foxgloves are particularly attractive when seen growing among shrubbery or in bold masses along walks or drives. They are perennials, blooming the second year from seed, growing three to five feet tall and producing long spikes of large flowers in various colors. Seed may be sown in the open ground in May and the plants transplanted to the permanent bed when large enough, or the next spring, setting them about two feet apart. When the center spike begins to fade it should be cut out and the side shoots will then grow more vigorously.

No. 165. FOXGLOVE—Mixed colors.
Pkt., 10c; ¼ Oz., 35c

No. 1086. FOXGLOVE—White Gloxinia-flowered.
Pkt., 10c; ¼ Oz., 40c

No. 1087. FOXGLOVE—Pink Gloxinia-flowered.
Pkt., 10c; ¼ Oz., 40c

No. 1088. FOXGLOVE—Bright yellow Grandiflora.
Pkt., 10c; ¼ Oz., 50c

Plant a few gourds on the garden fence for the kids to play with. Wait until it is warm before planting. They make lots of vines in a hurry.

Eschscholtzia

California Poppy

The Eschscholtzia is the state flower of California and an annual of striking character, both as regards the form and color of its flowers, which are bright and rich in their tints of yellow, orange and mixed colors. The plants average about a foot in height, have attractive, silvery foliage, and produce their large poppy-like flowers quite lavishly from early spring until frost. They are most effective when grown in beds of considerable size, over which the seed may be thinly sown broadcast and lightly raked in. These sowings may be made early in spring, or late in autumn for earlier germination and bloom the next spring. The Eschscholtzia is also very useful as a pot plant and for cut flowers. In the garden they self-sow but do not transplant readily.

No. 192. ESCHSCHOLTZIA—True California Poppy. Orange-yellow.

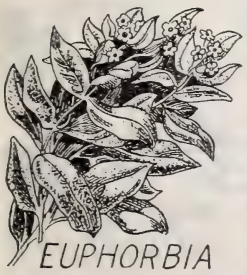
Pkt., 10c; ¼ Oz., 25c

No. 1089. Special Mixed ESCHSCHOLTZIA—All colors.

Pkt., 10c; ¼ Oz., 35c

Euphorbia Variegata

Snow on the Mountain



An annual garden plant growing two or three feet high bearing an abundance of beautiful green foliage, broadly marked with silvery-white and bearing small flowers. Very attractive and ornamental and can be planted as a background for lower plants or for use in mixed border. Seeds are best sown out of doors during the fall or in spring, after frost is over in places where the plants are to stand. Plants prefer heat and full sunshine but will grow on rather poor soil. Of open free-branching growth, three feet in height.

No. 1126. EUPHORBIA VARIEGATA—White.

Pkt., 10c; ¼ Oz., 35c

Gaillardia

Blanket Flower

The Gaillardias are easily grown from seed. Sow seed in boxes during December or January and transplant when danger of freezing weather is past or sow seed in open ground in April. They grow in a compact, bushy form, about two feet high and the same in breadth, bearing freely until late in fall, large, brilliant flowers in red and yellow blended and shaded, on long slender stems. Splendid for borders and cut flowers and should not stand closer than one foot apart. They do best in light, well-drained, fertile soil, fully exposed to sun and air.

No. 444. SINGLE GAILLARDIA—Mixed colors.

Pkt., 10c; ¼ Oz., 30c

Geum

Avens

A pretty perennial of low growth sending up flower stems two feet long. The flowers are double and measure two inches in diameter; rich orange-scarlet. Plants are of easy culture and bloom profusely over a long period. They mix well with dwarf growing perenial border plants and are adapted to rock gardens. The Geum is a most excellent flower to use for bouquets. When the flowers are cut they should be immediately immersed in water to prevent wilting.

Seed may be sown outdoors any time from early spring until fall. Blooms first year from seed if sown early. Pulverized soil, preferably light, sandy loam gives best results. Cover seed with fine soil about quarter of an inch deep and when plants are well established thin out or transplant to about eight inches apart.

No. 1131. GEUM—Mixed colors.

Pkt., 10c; ¼ Oz., 75c

The sweetest of all the mignonettes is the old-fashioned Reseda odorata.

Godetia

Evening Primrose—Satin Flower

Free-blooming annuals, with widely opened flowers of satiny texture and delicate colors. Suited for beds or borders, for pots and to grow in shrubbery borders in shaded places. They grow about eighteen inches high and bloom from early spring until frost. Colors red, pink and white, shaded and blended. Seed should be sown in the open ground in the fall or early in spring, in rather light or sandy soil, and thinned to one foot apart. They may be treated as biennials by sowing the seed in July and transplanting the young plants to a cold-frame, to be placed in the open ground the following May. If soil is very rich all foliage and no flowers will result. They often self sow. Plants get leggy and weak if crowded for room.

No. 1141. GODETIA — All varieties mixed.

Pkt., 10c; ¼ Oz., 35c

Gypsophila

Baby's Breath

Hardy annuals and perennials growing one to two feet high and producing a profusion of small star-shaped flowers, mostly white; useful for hanging baskets and for mixing with bouquets. Sow seed of the annual varieties either in fall or early in spring and at intervals for succession, either in beds, seed beds, boxes, or pots, and thin or transplant to about one foot apart. Seed of the perennial varieties may be sown in spring but it is better to sow in September and winter over in a cold-frame.

The name "Gypsophila" means Gypsum loving, therefore, these plants prefer limestone soil.

There are both annual and perennial varieties which are graceful and delicate, and of special value for mixing with other flowers in bouquets.

No. 925. GYPSOPHILA SNOWFLAKE (elegans alba pura)—An improved large-flowering hardy annual variety, producing graceful sprays of pure white blossoms. Grows about two feet high.

Pkt., 10c; ¼ Oz., 20c

No. 1090. GYPSOPHILA ELEGANS ROSEA—Soft pink. Hardy annual; two feet high.

Pkt., 10c; ½ Oz., 35c

No. 918. GYPSOPHILA PANICULATA—Hardy perennial. White; two feet high.

Pkt., 10c; ¼ Oz., 25c

Heliotrope

Everyone loves the delightful fragrance and beauty of the Heliotrope but few know that it can be raised from seed easily. To insure a long period of bloom the seed should be sown indoors during February and the plants set out, twelve inches apart in rich, well prepared soil when the danger from frost is past. They thrive in a sunny location and require plenty of water when in bloom. To encourage a bushy growth pinch back the young main shoots. Cover seeds but ⅛ inch with fine, rich soil.

No. 1179. HELIOTROPE — Sweet scented.

Pkt., 10c; ⅛ Oz., 40c

Hibiscus

Mallow Marvels

The perennial Mallows bear some of the largest flowers of any of our perennials and present a glorious sight when in bloom. The flowers resemble single Hollyhocks excepting that they are much larger, six inches across a single bloom is not unusual. Colors range from white with crimson centers to deep crimson. Foliage is a grayish green and plants grow four to six feet high and require much room. Will bloom the first year from seed if started early indoors. They transplant readily and prefer moist soil. Set three feet apart. They open only in full sunlight.

No. 1167. HIBISCUS—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

Hollyhock

These too frequently neglected old-fashioned perennials are most pleasing and attractive when seen in groups or long rows against hedges or shrubbery as a background and, in turn, form a very satisfactory background for plants of lower growth. Sow in January under cover and transplant to open ground as early as possible setting plants about eighteen inches apart or sow seed in September where plants are to remain. The plant is amenable to training, and if the tip of the main stalk is pinched off it may be kept at any desired height, and the side branches will then develop and form a bush.

No. 37. DOUBLE HOLLYHOCKS, Mixed—The best double perennial Hollyhocks in mixed colors.

Pkt., 10c; ¼ Oz., 25c

No. 1091. HOLLYHOCKS, Blood Red—Double, perennial.

Pkt., 10c; ¼ Oz., 30c

No. 1092. HOLLYHOCKS, Pink—Double, perennial.

Pkt., 10c; ¼ Oz., 30c

No. 1093. HOLLYHOCKS, Black—Double, perennial.

Pkt., 10c; ¼ Oz., 30c

No. 1094. HOLLYHOCKS, White—Double, perennial.

Pkt., 10c; ¼ Oz., 30c

No. 1095. HOLLYHOCKS, Yellow—Double, perennial.

Pkt., 10c; ¼ Oz., 30c

No. 961.—HOLLYHOCK, LILLY'S Annual — Everblooming. This splendid variety is a hardy annual, and if planted early will begin blooming in July or August. The diversity of forms and colors among flowers affords many delightful surprises. Some of the flowers will be densely double, other semi-double, and others single, all being of the most beautiful colors and shades.

Pkt., 10c; ¼ Oz., 35c

Clean the rubbish off the garden and burn it the first good day. It is a great harbor for the eggs of bugs and spores of fungus pests.

Ice Plant

Fig Marigold

This annual is a curious plant with thick leaves covered with glistening dots or ice-like globules. The flowers are white or light rose, but not showy. The plants are trailing or creeping and are seldom more than six inches tall. These plants are useful for rough spots in the garden where the soil is dry and the sun is very hot. Sow outdoors after the ground is warm. They require very little water. A very pretty and interesting plant for hanging baskets, rock work and edging.

No. 1180. ICE PLANT—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

Kochia

Burning Bush

This most popular ornamental annual is also known as Summer Cypress. It is very quick growing, and may be sown in the open when the trees are coming out in leaf. The plants branch freely and are perfectly round. The foliage is fine and feathery and of clean, bright green color; early in the fall the bush takes on a deep carmine hue and finally turns to a fiery red. Hardy annual, height 2 to 3 feet. A very attractive plant at all times.

No. 1135. KOCHIA, TRICOPHILLA—Flaming red.

Pkt., 10c; ½ Oz., 25c

Lantana

An exceedingly popular and rapid growing bushy plant, bearing large heads of Verbena-like clusters of fragrant flowers in a wide variety of changing colors. The blooms are succeeded by a profusion of green

berries which change to deep blue when ripe. Half hardy perennial, best treated like an annual in the Northwest, 2 to 3 feet in height.

Seeds may be sown outdoors early in spring so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of blooms the following spring and summer. Flowers are orange, white, rose and other colors.

No. 1142. LANTANA—Mixed colors.
Pkt., 10c; ¼ Oz., 25c

Larkspur

Delphinum

The annual varieties are quite hardy, and the seed may be sown in the open ground in the fall, and will germinate very early in the spring, or it may be sown early in spring. The tall varieties are suitable for shrubberies and borders, and the dwarf varieties for beds. Either are splendid for cutting. They bloom best in rather cool, moist soil. They should be thinned to stand six to eighteen inches apart, according to variety. There are also perennial varieties. Colors range from white to carmine, light pink, light scarlet, light blue and dark purple. They self sow.

No. 927. LARKSPUR, DWARF ROCKET—A splendid hardy annual Larkspur, growing only one foot high and producing large, double, hyacinth-like blooms in a variety of charming colors.
Pkt., 10c; ¼ Oz., 30c

No. 208. LARKSPUR, TALL ROCKET—A tall hardy annual Larkspur, growing about two and one-half feet high, mixed colors.
Pkt., 10c; ¼ Oz., 35c

Lavender

Perennial. Mostly grown for the sweet-scented flowers which, when dried, are placed in linen closets and wardrobes to impart their delicate perfume to the linen and clothing. Delightfully fragrant. Flowers from June to August. Lavender is generally catalogued as an herb, principally used for its aromatic properties. Sow the seed early in spring, in light, mellow soil and cover lightly. When plants are 2 or 3 inches high, thin to a foot apart. Plants attain immense size after a few years.

No. 2000. LAVENDER—Sweet scented.
Pkt., 10c; ¼ Oz., 25c

Linum

Crimson Flax

This is a very pretty dwarf annual. The rich crimson flowers last only a day, but they are borne continuously until frost. Makes a splendid subject for massing or may be planted as an edging. The annual Crimson Flax is truly beautiful and forms clumps in the border where the glowing flowers are a delight of gracefulness. It grows about a foot and a half tall with wide, open, glossy bright flowers. The seed is perfectly hardy and may be sown outdoors in the late fall or early in the spring. Thin the plants to stand 4 to 6 inches apart. A succession of bloom is obtained by sowing additional seed several times during the season.

No. 1143. LINUM, GRANDIFLORA RUBRUM—Scarlet.
Pkt., 10c; ½ Oz., 25c

Lobelia

These charming little half-hardy annuals grow four to six inches high, forming compact little bushes literally covered with small bright flowers. For beds, edgings, baskets and pots there is nothing prettier. The seeds may be sown outdoors in early spring, thinning or transplanting the young plants four or five inches apart. There are also tall, perennial varieties.

No. 195. LOBELIA, EMPEROR WILLIAM—A very dwarf, compact variety, covered with white, blue-margined flowers from June to November.
Pkt., 10c; ⅛ Oz., 25c

No. 1096. LOBELIA, SAPPHIRE — A trailing variety, bearing very large deep blue flowers with a pure white eye.

Pkt., 10c; ⅛ Oz., 30c

No. 196. LOBELIA, CRYSTAL PALACE—Compact plants, dark foliage, and rich deep blue flowers.

Pkt., 10c; ⅛ Oz., 30c

No. 304. LOBELIA, ERINUS HAMBURGIA—A trailing Lobelia, for hanging baskets or window boxes. Large dark blue flowers.

Pkt., 10c; ⅛ Oz., 40c

Lupins

Free - flowering easily grown annuals, about two feet high, with long graceful spikes of rich and various colored pea-shaped flowers. Valuable for mixed borders, beds and for cutting. Does best in partial shade. As a border plant the Lupin is quite interesting; the cut flowers are exquisitely suitable for graceful bowl arrangements. Sow the seed late in the fall or very early spring, where the plants are to remain as they are difficult to transplant. Thin so the plants stand at least a foot apart.

No. 46. LUPINS—Annual, mixed colors.

Pkt., 10c; ½ Oz., 20c

Marigold

(Tagetes)

There are two distinct types of these garden annuals. The French marigolds are the most compact and regular in growth, and are useful for bedding. The African Marigolds are better suited for planting in mixed borders or among trees and shrubs. The seeds of either type may be planted in the open ground in April, but earlier bloom may be had by starting the plants in the house. They transplant readily and often self sow. A favorite combination for the table is Marigold and Larkspur. When most other flowering plants are becoming dry and brown in the fall the Marigolds show up in all their brilliance. They succeed best in light soil with full exposure to the sun. Either variety is splendid for cut flowers.

No. 409. MARIGOLD, TALL DOUBLE AFRICAN—About two feet high with flowers three or four inches in diameter in shades of yellow and orange.

Pkt., 10c; ½ Oz., 50c

No. 410. MARIGOLD, TALL DOUBLE FRENCH—The plants grow about one and one-half feet high. The colors and markings of the large double flowers, are very interesting, some being elegantly striped and spotted.

Pkt., 10c; ½ Oz., 40c

No. 146. MARIGOLD, DWARF DOUBLE FRENCH—One foot high, with large flowers in mixed colors.

Pkt., 10c; ½ Oz., 50c

Michaelmas Daisy

Perennial Asters

No special culture is necessary. Plant them and if given extra food and water they will repay us; if not they bloom beautifully to shame us for our neglect. Of course, in the garden where neatness is necessary we do not stake the tall sorts. They seem to grow well either in full sun or partial shade. They are perennials and are easily started from seed planted after the soil has become thoroughly warm. The bloom period is the late fall when the clouds of bright colored blooms delight us. Height 2½ to 4 feet. Very useful as cut flowers.

No. 1081. MICHAELMAS DAISY—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

Mignonette

(Reseda)

No garden is complete without a plentiful supply of this hardy annual. The seed can be sown outdoors at any time after the middle of April, and if planted at intervals of three weeks until August, its fragrant, modest

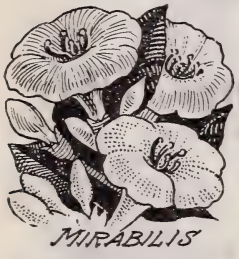
colored flowers may be gathered until November. It grows about one foot high, and should be thinned to eight to twlve inches apart. Does not transplant readily and when moving is necessary a large ball of earth should be moved with the seedling. Disbudding induces long spikes and stems. Prefers the cool weather of spring and fall.

No. 139. MIGNONETTE, RESEDA ODORATA—The old-fashioned, sweet scented Mignonette.

Pkt., 10c; ¼ Oz., 25c

Mirabilis

Marvel of Peru, Four o'Clock



A perennial in warmer climates, but here it is treated as a hardy annual. It is a quick growing, erect, bushy herb, attaining a height of two or three feet and blooming during the late summer and autumn. The flowers are shaped like a Morning Glory, come in white, yellow, crimson and striped and open only late in the afternoon and on cloudy days. The seed should be planted in the hotbed or in the house in March and transplanted to the open ground in May, setting the plants about one foot apart. They sometimes manifest their perennial habit of developing tuberous roots sufficiently large to be lifted and stored like those of the Canna. They often self sow.

No. 51. MIRABILIS JALAPA — Mixed colors.

Pkt., 10c; ½ Oz., 20c

Myosotis

Forget-Me-Not

These dainty little flowers are hardy perennials. love cool, moist soils, and like pansies, bloom most freely in fall and early spring. They are good in borders, also satisfactory as winter-blooming plants in a cool room or cold-frame. Sow the seed in early spring in a warm, sunny border. They bloom freely in the first season and profusely the second year. They grow about six inches high, and the plants should stand six inches apart.

No. 310. MYOSOTIS, VICTORIA DWARF—A very beautiful hardy biennial variety; of dwarf, bushy habit, bearing large clusters of the brightest azure-blue flowers on long, graceful stems, rendering them splendid for cutting.

Pkt., 10c; ⅛ Oz., 35c

No. 1054. MYOSOTIS, PALUSTRIS—The true Forget-Me-Not. A hardy perennial of strong,, sturdy growth with beautiful clear blue flowers.

Pkt., 10c; ⅛ Oz., 75c

Nasturtium

No other annual will produce such a profusion of flowers for so long a time with the same outlay of time and labor. They bloom profusely during the entire season from early summer until killed by frost, and will thrive almost anywhere, and under almost any conditions. They produce the best blooms if the soil is not too rich, and require very little moisture. Rich soil and too much water will produce luxuriant foliage at the expense of flowers.

The dwarf or Tom Thumb varieties have a neat, compact habit of growth, forming a small, round bush about a foot high, with attractive foliage, and a profusion of large flowers nestled in among the green leaves. The seed should be planted about one inch deep, after the weather is thoroughly settled in spring, in the position in which they are to remain. If the seed is planted thinly it will not be necessary to thin the plants, as they will stand considerable crowding. A few plants may be started in pots in the house in early spring and transferred to the open ground when warm weather has come to stay, if early blooms are desired.

Nasturtiums are not troubled with any disease or insect pests. The seeds and pods may be pickled, and the leaves are used like cress in salads.

No. 87. LILLY'S NASTURTIUMS, Dwarf—Mixed colors. The choicest standard dwarf varieties and colors mixed. Splendid for beds and borders.

Pkt., 10c; Oz., 15c; ¼ lb., 50c; 1 lb., $1.50

For Nasturtiums in separate colors see next page.

Prices Following Varieties in Color
Pkt., 10c; Oz., 25c

No. 1068. NASTURTIUMS, KING THEODORE—Velvety red flowers; dark foliage.

No. 1070. NASTURTIUMS, PRINCE HENRY—Light yellow marbled with scarlet.

No. 929. NASTURTIUMS, QUEEN OF TOM THUMB—Rich, bright crimson flowers forming a pretty contrast to the silver variegated foliage. Splendid for bedding or pots.

No. 907.—NASTURTIUMS, DWARF VESUVIUS—Deep salmon-rose; a beautiful shade.

No. 1112. NASTURTIUMS, LADY BIRD—Orange, striped with bright scarlet.

No. 264. NASTURTIUMS, EMPRESS OF INDIA—Fiery crimson flowers; compact plant with very dark foliage.

No. 911. NASTURTIUMS, DWARF CHAMELEON—All colors borne on each plant.

No. 1071. NASTURTIUMS, DWARF IVY LEAVED—Mixed colors. Deep green leaves of distinctive ivy form; flowers beautifully fringed.

No. 1067. NASTURTIUMS, GOLDEN KING—Rich golden-yellow.

No. 1069. NASTURTIUMS, CRYSTAL PALACE GEM — Sulphur-yellow spotted with crimson.

Nemophila

Baby Eyes

These small, dainty annual plants from California are of a spreading habit and the leaves are pale green, deeply cut and slightly hairy. The flowers are cup-shaped, white, and blue with white centers. The plants grow a foot tall and are profuse bloomers throughout the summer. Excellent for edgings and low groups in the border. They are best grown in partial shade and moist soil and their long season of bloom commends them for every garden. Sow the seed in the open in the late fall or early spring where the plants are to remain and thin to 6 or 8 inches apart. Sow at intervals of three weeks for a succession of bloom.

No. 1145. NEMOPHILA—Mixed colors.
Pkt., 10c; ½ Oz., 25c

Nicotiana

Flowering Tobacco

The evening fragrance of Nicotiana is most delightful; in addition the flowers are attractive in form and color which ranges from creamy white and pink to violet and crimson. The flowers are borne in great profusion on long stems. The foliage is abundant and forms a cluster about the base of the plant. They are slender in growth and show off best with a background of taller plants. The seed is very tiny and should be sown carefully. The seedlings make slow growth unless started in hotbed or sunny window. The soil should be rich and well pulverized. Height about three feet, plant to stand a foot apart.

No. 1146. NICOTIANA, SANDERAE—Mixed colors.
Pkt., 10c; ½ Oz., 25c

Nigella

Love-in-a-Mist.—Devil-in-a-Bush

Compact, free flowering hardy annuals growing in bush form about one foot high. The foliage is finely cut and the flowers and seed pods are unique. Sow the seed outdoors during the late fall or in spring after danger of frost is past, and at intervals during the summer for succession. For early blooms the plants may be started indoors early in spring, or the seed may be sown in fall and the plants wintered over in a cold-frame. They often self sow, however, and the plants begin to bloom when quite small.

No. 248. NIGELLA, DAMASCENA—Blue and white.
Pkt., 10c; ¼ Oz., 25c

Pansy

The pansy is a hardy perennial, requiring a cool, moist climate, and for that reason attaining the highest state of perfection west of the Cascades, where the largest and brightest blooms are produced in the greatest profusion and continuously from early spring until late in the fall. It is a favorite with everyone, and gives satisfactory results with a moderate amount of care. For early outdoor bedding, the seed is sown late in August or early in September in rich garden soil, in a cool location, and as soon as the plants are large enough to handle they are transplanted four inches apart in cold-frames.

Satisfactory results for the home garden, although not as early blooms, may be had by sowing the seed in cold-frames in early spring, so that they will have a good root system before hot weather.

There are four essentials for best results. First, good rich, loamy soil that will hold moisture well. Never allow the beds to become dry. Any dryness after the seeds sprout is absolutely fatal. Second, frequent cultivation, to keep a dust mulch on the surface and to allow circulation of air in the soil. Third, to pick all blossoms as soon as they are past their prime as they will be larger and more perfect as the season advances if seed-pods are not allowed to form. Fourth, plant in a cool position. Frequent applications of Morcrop, cultivated into the soil, will be very beneficial.

No. 89. PANSY, FINE ENGLISH—Finest varieties and colors of English Pansies Mixed. The plants are of compact habit.

Pkt., 10c; ¼ Oz., 50c

No. 90. PANSY, GIANT FLOWERED FRENCH—A fine mixture of large flowering French varieties.

Pkt., 10c; ¼ Oz., 60c

No. 92. PANSY, GIANT TRIMARDEAU—Mixed colors. A splendid type of immense size, distinct shape and beautifully marked. The plants are deep rooted, enabling them to withstand drought, hardy and robust.

Pkt., 10c; ¼ Oz., 60c

No. 94. PANSY, BEACONSFIELD—A very large Pansy, with upper petals light lavender and lower petals purple.

Pkt., 10c; ¼ Oz., 60c

No. 203. PANSY, EMPEROR WILLIAM—Dark navy blue; of large size and very showy.

Pkt., 10c; ¼ Oz., 60c

No. 95. PANSY, SNOWFLAKE—Large Satiny-white flowers with light centers.

Pkt., 10c; ¼ Oz., 60c

No. 178. PANSY, FAUST, or King of the Blacks. Very large and very dark, almost black.

Pkt., 10c; ¼ Oz., 60c

No. 429. PANSY, GOLDELSE, or Yellow Gem. Pure golden-yellow; large.

Pkt., 10c; ¼ Oz., 60c

No. 1147. PANSY, MAROON, as named, very large.

Pkt., 10c; ¼ Oz., 60c

No. 930. PANSY, LILLY'S Colossal MIXTURE—Is a splendid mixture of the choicest large-flowering varieties and the most beautiful colors and markings.

Pkt., 10c; ¼ Oz., 50c

Petunia

A tender perennial, of several distinct types variously adapted for greenhouse and pot culture and for open air. The seed should be sown in March, in a gentle hotbed, cold-frame, or in a box in the house, and the seedlings transplanted about a foot apart, in rich garden loam, after all danger of frost is past, and the ground has become thoroughly warmed. The seed should not be covered as most other seeds, but should be merely sown on the surface, and pressed slightly into the soil. The double varieties are more difficult to grow than the single varieties.

No. 61. PETUNIA, CHOICE SINGLE—A choice mixture of fine single varieties and colors.

Pkt., 10c; ¼ Oz., 35c

No. 1148. PETUNIA, GIANTS OF CALIFORNIA—Special strain of this favorite new type flower, mixed colors.

Pkt., 25c; 1-32 Oz., $3.50

No. 1149. PETUNIA, DOUBLE GIANTS—Full and double, deeply fringed and waved, none finer on the market, mixed colors.

Pkt., 25c; 1-16 Oz., $4.00

Phlox

The annual phlox, sometimes called flame flower, is particularly useful and attractive when grown in masses or ribbon beds of contrasting colors. Few annual plants are more easily grown from seed, give a quicker return of bloom, or offer such a variety to choose from as do the phloxes. There are few desirable colors beyond their range, and if given good soil and plenty of water they furnish a supply of delicate flowers for cutting throughout the season. They are also useful in the window garden, and as undergrowth for tall, bare-stemmed plants. The first sowing of seed should be made in the fall or very early in spring, and later ones in May, either where the plants are to bloom or in a seed bed as the phlox transplants readily. In transplanting, set the taller kinds about a foot apart; if planted too thickly they suffer from mildew. The removal of flowers and seed-pods makes the plants more bushy and compact and lengthens their blooming period. The tall varieties grow about twelve inches high; the dwarf varieties about six inches.

No. 919. LILLY'S Large Flowering PHLOX—(Phlox Drummondi Grandiflora.) This is the finest type, having the largest heads of bloom and the largest individual flowers. This mixture contains all the most beautiful colors and shades. Fifteen inches high.

Pkt., 10c; ¼ Oz., 35c

No. 67. PHLOX, DRUMMONDI—Flowers are not so large as those of the grandiflora type, but just as bright and free blooming. Fifteen inches high, mixed colors.

Pkt., 10c; ¼ Oz., 35c

Perennial Phlox

(Decussata)

A very handsome variety of Phlox quite different from the annual. The individual flowers are large and borne in immense heads on tall stems. They flower during the summer and fall and come up from the old roots in the spring. Seed may be sown in spring or fall. Extra choice mixture.

No. 1133. PHLOX, PERENNIAL—Mixed colors.

Pkt., 10c; ¼ Oz., 75c

Pinks

(Dianthus)

The large and varied genus of Dianthus contains some of our most beautiful flowers. The most of them are hardy perennials that bloom freely the first season, the plants remaining green all winter and blooming the next year if protected by a mulch. Old plants flower the earliest, but as young ones give the best flowers, new plants are usually grown each year. Seed is sown in the hotbed or in the house in February, and the young plants transplanted out of doors, six to ten inches apart, in April or May. Late fall planting out of doors is also practical with good success. They do best in a well-drained bed made up of turfy loam, leaf mold, and well-rotted manure, thoroughly mixed. They will not stand too much moisture, and are more liable to winter-kill from being planted in a wet place than from cold.

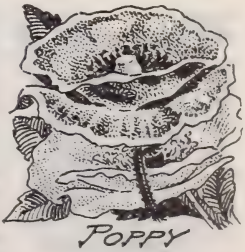
No. 288. MAY PINKS.—The old-fashioned single flowered garden or border Pink. They are hardy annuals, and will flower the first season from seed sown outdoors in spring. Height, one foot, mixed colors.

Pkt., 10c; ¼ Oz., 40c

No. 1150. CHINESE PINKS — Double mixed. They are strong growers and unexcelled for borders, beds or for cutting. 10 to 16 inches high.

Pkt., 10c; ¼ Oz., 35c

Poppy



No other plants possesses so bold and brilliant a flower, coupled with the same grace of stem, delicacy of tissue, and earliness and continuity of bloom as the poppy. For beds and borders, with a background of green, there is nothing which will produce a more striking contrast. A sandy loam suits them best, and as their strong taproots are difficult to transplant, it is well to sow the seed where the plants are to

bloom. The seeds should be sown thinly, covered very lightly, and the young plants thinned to one foot apart. A long succession of flowers may be had by planting the seed in the fall and at intervals during the spring.

No. 314. SHIRLEY POPPY—A charming hardy annual with large fluted and crinkled flowers in a variety of forms and colors. If cut before the blooms are fully opened they will keep fresh in water several days.

Pkt., 10c; ½ Oz., 25c

No. 58. UMBROSUM POPPY—Rich vermilion flowers with a black spot on each petal. Hardy annual.

Pkt., 10c; ¼ Oz., 40c

No. 341. ICELAND POPPY—This is a hardy perennial, but will bloom the first year from seed. It bears a profusion of graceful, delicate, single flowers with petals like tissue paper. Mixed colors.

Pkt., 10c; ¼ Oz., 25c

No. 1030. ORIENTAL POPPY — Mixed Hybrids. Hardy perennials, producing immense flowers in gorgeous colors.

Pkt., 10c; ¼ Oz., 35c

No. 351.—MIXED POPPIES—A choice mixture of hardy annual varieties.

Pkt., 10c; ½ Oz., 25c

No. 1114. FLANDERS POPPY—Bright scarlet. The Memorial Poppy from the fields of Flanders.

Pkt., 10c; ¼ Oz., 25c

No. 1151. POPPY, MIXED DOUBLE—Annuals. All varieties.

Pkt., 10c; ½ Oz., 25c

Portulaca

Sun Plant

PORTULACA

This bright flowered, thick-leaved annual is unrivaled for brilliancy among plants of low growth. It flourishes under extremely adverse conditions, even in hot sun and light soil and with sparse water supply. It is satisfactory for beds, edgings and rockwork, and for filling up spaces in flower beds, also as an undergrowth for taller plants. It is particularly useful in the Northwest. The seed does not germinate until hot weather, and should be sown late. Beyond sowing the seed, little care or attention is required. The seed should be pressed into the ground, not covered. Desirable for beds, embankments or rockeries. Predominating colors are clear yellow, white, scarlet, crimson, orange and rose.

No. 69. PORTULACA, SINGLE—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

No. 70. PORTULACA, DOUBLE—Mixed colors.

Pkt., 10c; ¼ Oz., 50c

Primrose

Primula

PRIMROSE

These half-hardy perennials are splendid for winter and spring decorations in the home or conservatory. The hardy varieties are used for beds and borders and may be handled in the same manner as pansies.

Sow seed indoors in boxes from April to July to insure flowering the following winter. Cover seeds very lightly with finely pulverized soil. When seedlings are well up, transplant to other boxes or pots and keep in a cool place. Plants thrive best in a mixture of leaf mold, sand and loam. Seed may also be sown in fall.

No. 75. PRIMULA VERIS—A beautiful hardy perennial, growing six inches high, and bearing clusters of fragrant flowers in various colors.

Pkt., 10c; ⅛ Oz., 75c

Pyrethrum

PYRETHRUM

Single flowering perennial hybrid Pyrethrum, popularly called Painted Daisies because of the many shades of rose, flesh, pink, white, crimson, etc., in which its daisy-like flowers are produced. Blossoms are large, often 3 to 4 inches across, borne in profusion on stems about 2 feet long. They remain in bloom a long time.

Seeds may be sown outdoors early in

spring, so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of blooms the following spring and summer.

No. 1187. PYRETHRUM, HYBRIDUM SINGLE—Mixed colors.

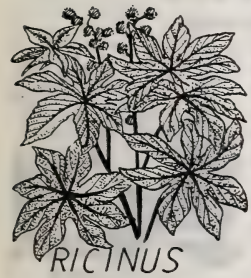
Pkt., 10c; ¼ Oz., 25c

No. 76. PYRETHRUM, PARTHENIFOLIUM AUREUM—One of the best plants of edging, grown for its beautiful yellow foliage. Known also as Golden Feather, it is a hardy perennial, but is generally grown as an annual. Six inches high.

Pkt., 10c; ¼ Oz., 25c

Ricinus

Castor Oil Bean



A tall, majestic, foliage plant with broad, ornamental palm-like leaves of glossy green or bronzed metallic hue and long spikes of scarlet or green. Grown singly it forms a picturesque pyramid of gorgeous leaves, which together with its brilliantly colored seed pods, makes of the whole a truly tropical picture. Height, 6 to 15 feet.

Sow seed 2 inches deep during late spring, or plants may be started indoors early in the year. Set out or transplant to about 4 feet apart.

No. 140. CASTOR OIL BEAN.

Pkt., 10c; Oz., 25c

Rudbeckia

(Purpurea)

A beautiful showy, hardy perennial, producing an abundance of large, handsome, crimson-purple flowers with dark central disc. Good for massing, growing 3 to 5 feet high. Blooms from early summer till late fall and often, after through blooming, if plants are cut back and kept well watered they will produce a second bloom. These flowers are fine for cutting. The leaves are large and thick. They will tolerate dry, sun-baked locations, but are better in good soil. Wait until the soil is good and warm before planting the seed. When 2 inches high, thin to 6 inches apart. Seed can also be sown in fall. There are usually no flowers until the second season, unless started very early under glass and transplanted when blooms may be had in autumn. Old roots may be divided and reset each spring.

No. 1169. RUDBECKIA—Purple cone flower.

Pkt., 10c; ¼ Oz., 25c

Salpiglossis

Painted Tongue

Very showy half-hardy annual bedding or border plants growing two to three feet high and bearing richly colored funnel-shaped flowers. For early bloom, plants should be started indoors in March and transplanted to the bed, one foot apart, when the weather is warm and settled. Seed may be sown outdoors when danger of frost is past. The seeds are extremely fine and should be planted with care. If the centers of the young plants are pinched out it will cause them to branch. Sandy soils are best suited to Salpiglossis, but they do well in partial shade. Desirable for bouquets as the blooms keep well in the water after being cut.

No. 406. SALPIGLOSSIS—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

Salvia

Flowering Sage

Half hardy perennial, blooming the first season. One of the most stunning and brilliantly colored of all garden flowers. Their compact bushes are literally ablaze with brilliant, intense scarlet spikes, often 8 to 12 inches long, from midsummer until the late fall. Height, about 3 feet.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to the open after ground has become warm and the weather thoroughly settled.

No. 920. SALVIA SPLENDENS.
Pkt., 10c; ¼ Oz., 60c

Scabiosa

Mourning Bride

Quite hardy plants, flowering freely in cool locations or during the late summer and fall months. The seed should be sown thinly in shallow drills early in spring when the trees are starting out in leaf. When well started, thin out or transplant to stand 6 inches apart. The tall sorts form compact, rounded plants of dark green foliage, 8 to 10 inches in height. The flowers are borne on tall, slender, but quite stiff stems, nearly 2 feet in height, and are of fine rounded, full-centered form, composed of small tubular petals from which project the small pistils, giving them a feathery appearance. These are succeeded by curious hairy seed-pods. Its great succession of richly colored blossoms, borne on long stems, make it one of the most decorative of all garden flowers. Blossoms last for about a week after being cut.

No. 1134. SCABIOSA—Tall mixed.
Pkt., 10c; ¼ Oz., 20c

Schizanthus

Poor Man's Orchid

When in full flower, the foliage is practically hidden by the innumerable butterfly-like blooms which range in color from pure white through shades of cream and pink to crimson and mauve. These make excellent pot plants. Sown indoors early in January in pots of rich soil they will form large, compact bushes over 2 feet high, completely covered with beautiful small flowers. Easily forced in a cool greenhouse during winter time. Sow outdoors in the fall or spring. They do not transplant readily. It is, therefore, wise to move the seedlings while young with a considerable amount of earth. The plants naturally grow straggling and should be pinched back to make them bushy. Thrives best when situated in a slightly sheltered location.

No. 1152. SCHIZANTHUS, WISETONENSIS—Mixed colors.
Pkt., 10c; ⅛ Oz., 50c

Stocks

(Matthiola)

The plants are vigorous, have a good habit of growth, fragrant flowers in various colors, are adapted to bedding, edging, pot culture, house or conservatory use, and are splendid for cutting. They are hardy annuals, grow about two feet high and should be planted about one foot apart. For early blooms, the seed should be sown in the hotbed or in the house, in March, and when the plants are one inch high they should be transplanted to another part of the hot-bed. Frequent transplanting during their early growth will give them a more dwarf and compact habit. Seed may be sown outdoors in April or May, and will produce blooms in July or August. If plants that began to bloom late are carefully lifted and potted in the fall, they will flower freely in a house or room that is rather cool and moist. Stocks enjoy a well-enriched soil thriving best in cool moist locations. Pinching back some of the plants makes them branch and lengthens the period of bloom.

No. 84. STOCKS, LARGE FLOWERING—Dwarf Ten Weeks, mixed colors. Half hardy annual, 1 foot high.
Pkt., 10c; ⅛ Oz., 35c

No. 1107. STOCKS, LARGE FLOWERING—Dwarf Ten Weeks, white.
Pkt., 10c; ⅛ Oz., 50c

No. 1108. STOCKS, LARGE FLOWERING—Dwarf Ten Weeks, flesh-pink.
Pkt., 10c; ⅛ Oz., 50c

No. 1109. STOCKS, LARGE FLOWERING—Dwarf Ten Weeks, crimson.

Pkt., 10c; ⅛ Oz., 50c

No. 1110. STOCKS, LARGE FLOWERING—Dwarf Ten Weeks, light blue.

Pkt., 10c; ⅛ Oz., 50c

No. 1111. LILLY'S ANNUAL STOCKS, SPECIAL MIXTURE—Choicest varieties and colors of annual Stocks.

Pkt., 10c ⅛ Oz., 35c

Sunflower

Helianthus

These tall-growing, bright flowered annuals have suffered the misfortune of having been cheapened by use as a burlesque. They are in reality very useful for backgrounds or even for bedding. The tall, single variety, with but one immense flower on a plant, with which we generally associate the name is only one of the many varieties. The dwarf, double, many-flowered varieties are really useful and artistic when skillfully employed. The seed should be planted in the open ground from the middle of April to the end of May, and the plants thinned to stand two to four feet apart, according to whether dwarf or tall.

No. 128. DWARF DOUBLE SUNFLOWER—This is a very double variety, growing about four feet high.

Pkt., 10c; 1-Oz., 35c

Sweet William

(Dianthus Barbatus)

Well known, attractive, free-flowering, hardy perennials, producing splendid effects in beds and borders. Sow the seed outdoors early in spring in a well-prepared seed bed, transplant or thin the plants to about six inches apart; or the seed may be sown in fall, and the plants wintered over in a cold-frame. Although they are perennials, flowers will be produced the first summer, and the best results will be had by growing new plants each year. Colors are white, the various shades of pink, rose, crimson, etc., many with penciled and colored centers.

No. 26. SWEET WILLIAM, SINGLE—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

No. 27. SWEET WILLIAM, DOUBLE—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

Verbena

The Verbena is a low-growing, creeping, half-hardy perennial usually treated as an annual, and is useful in beds, borders, mounds, window boxes, and for bouquets and table decoration. The seed should be sown in March, in the hot bed or in the house, and the plants transplanted outdoors after all danger of frost is past, setting them ten to fifteen inches apart in well-drained garden soil and a sunny position. They are suitable flowers for ground covering and make good masses in the border. As cut flowers they are attractive when loosely arranged in low bowls and vases. It is well to pinch back the plants when young to make them branch. Keep the flowers cut or they stop blooming when seed formation starts.

No. 1154. VERBENA, SPECIAL GIANT—Mixed colors. These are the latest introductions.

Pkt., 10c; ¼ Oz., 50c

No. 88. VERBENA, GIANT HYBRID—A splendid mixture of large flowering varieties; all colors.

Pkt., 10c; ¼ Oz., 50c

Wild Flower Garden

A combination of 15 to 20 different hardy annuals which will produce an abundance of blooms all summer. Desirable for out of the way corners or semi-wild spots. Sow the seed broadcast during March or April or May, after the ground has been put in good cultivation, and the effect will be most pleasing. Also effective for large window boxes.

There are few things more pleasing than a wild-flower garden hidden away in some secluded spot or among shrubbery. This mixture is ideal for the purpose, being composed of such hardy annuals as will require little care beyond scattering the seed, and will produce a great profusion and variety of pretty flowers.

No. 438. WILD FLOWER GARDEN.
Pkt., 10c; 1-Oz., 25c; Lb., $2.00

Violet

These little hardy perennials are unexcelled for beds, borders, and rock work. On account of its delightful fragrance, beautiful coloring and dainty appearance is unequalled for cutting. Grow about 4 inches high.

Seeds may be sown outdoors early in spring, so that plants will bloom during late summer and fall or started in early fall plants will produce a profusion of bloom the following spring and summer. Plants should have a light mulch of manure for protection during winter.

No. 319. VIOLET, LARGE SINGLE.
Pkt., 10c; ⅛ Oz., 50c

No. 1106. VIOLA CORNUTA—Tufted Pansy, Violets, mixed colors.
Pkt., 10c; ⅛ Oz., 50c

Wallflower

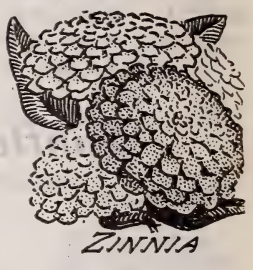
Well-known, deliciously fragrant, half-hardy perennials, producing spikes of beautiful flowers early in spring. Plants are bushy, growing to a height of 1 to 3 feet, foliage is dark green and flowers are borne on tall, graceful spikes. The seed should be sown early in the fall, the plants wintered over in a cold-frame and set out when danger of hard frost is past in spring.

No. 98. WALLFLOWER, DOUBLE—Mixed colors.
Pkt., 10c; ¼ Oz., 40c

No. 99. WALLFLOWER, SINGLE—Mixed colors.
Pkt., 10c; ¼ Oz., 25c

Zinnia

Youth and Old Age



A half-hardy annual, growing about eighteen inches high, and producing a multitude of large, double flowers of a great variety of colors and shades, valuable for groups, beds, borders, or hedges, and for bouquets. The colors are soft but glowing and include rose, orange, crimson, scarlet, yellow, salmon and purple. The seed should be sown in the open ground in early spring and the plants thinned to two feet apart. They will be at their best in August, and will continue to bloom until late in the fall. Place the plants in well enriched soil and working some fertilizer deep down under the plants is well repaid. Desirable for bouquets as the stems are long and stiff and blooms keep well after being cut. They are most effective in masses.

No. 933. ZINNIA, DOUBLE GIANT MIXED—A choice mixture, including the best and largest types, producing plants of handsome, compact form, and immense, perfectly formed, double flowers in brilliant mixed colors.
Pkt., 10c; ¼ Oz., 25c

No. 100. ZINNIA, MIXED—A splendid mixture of good varieties.
Pkt., 10c; ¼ Oz., 25c

No. 1155. DOUBLE GIANT ZINNIA—Golden yellow.
Pkt., 10c; ¼ Oz., 50c

No. 1156. DOUBLE GIANT ZINNIA—Lavender.
Pkt., 10c; ¼ Oz., 50c

No. 1157. DOUBLE GIANT ZINNIA—Pink.
Pkt., 10c; ¼ Oz., 50c

No. 1158. DOUBLE GIANT ZINNIA—Crimson.
Pkt., 10c; ¼ Oz., 50c

No. 1186. DOUBLE GIANT ZINNIA—White.
Pkt., 10c; ¼ Oz., 50c

No. 1182. DOUBLE GIANT ZINNIA—Canary yellow.
Pkt., 10c; ¼ Oz., 50c

No. 1164. ZINNIA, CACTUS OR QUILLED—Mixed.
Pkt., 10c; ⅛ Oz., 40c

No. 1159. DAHLIA FLOWERED ZINNIA—Golden.
Pkt., 25c; ⅛ Oz., $1.00

No. 1160. DAHLIA FLOWERED ZINNIA—Pink.
Pkt., 25c; ⅛ Oz., $1.00

No. 1161. DAHLIA FLOWERED ZINNIA—Crimson.
Pkt., 25c; ⅛ Oz., $1.00

No. 1162. DAHLIA FLOWERED ZINNIA—Lavender.
Pkt., 25c; ⅛ Oz., $1.00

No. 1163. DAHLIA FLOWERED ZINNIA—Mixed.
Pkt., 10c; ⅛ Oz., 50c

Everlastings

The Everlastings or Straw Flowers, with their rich, bright colorings, are most valuable for winter decorations.

Picking—With but few exceptions the Everlastings are cut before they are fully open because in many cases it is the outside involucre which is straw-like and retains its color when dried. Allow to open fully, Helichrysum and Acroclinium are not as attractive because the centers of the flowers turn brown.

Drying—In preparing these flowers for drying the leaves should be stripped from the stems; they are then assembled in bundles and hung up-side-down. If the stems are held together with rubber bands none of them will drop out of the bundle as they shrink from drying. It is best to dry the flowers quickly in a dark place and store them in a dry place until they are to be used.

Acroclinium

This is one of the smaller, daintier, annual everlastings growing 12 to 15 inches tall and bearing pink or white double daisy-like flowers with golden centers, singly on long stems in great abundance. The plant is attractive in the garden and also useful as a source of cut flowers. To secure bright, attractive flowers when dried, flowers should be gathered the first day they open.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to the open ground after it is warm and the weather thoroughly settled.

No. 1137. ACROCLINIUM (Everlasting)—White and pink mixed.
Pkt., 10c; ¼ Oz., 25c

Gomphrena

Globe Aramanth

Entirely different in appearance from any other everlasting flower, and very attractive. Has a globe-shaped flower.

The tiny Clover-like flowers of this plant may be aramanth (true purple), white or rose in color. The plants are annual and grow one to two feet tall. When fully developed cut and dry the flowers for winter bouquets. In the garden these flowers are most attractive when planted among white flowers which heighten their color by contrast. They do not blend well with other colors. Also good for fresh cut flowers. Plants should be set a foot apart.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed.

No. 1117. GOMPHRENA (Everlasting)—Mixed colors.
Pkt., 10c; ¼ Oz., 25c

Helichrysum

Strawflower

The Strawflower is the largest and showiest of the annual Everlastings. The large double flowers range from white to yellow, crimson, pink, rose, chestnut and rich purple. The plants grow two to four feet tall. Remember to cut the blooms before they are fully open as even the small, undeveloped buds will open while drying. It is best to start the plants early indoors and transplant to the garden a foot apart when the weather has settled. They are attractive when grown in beds in the garden and keep well as cut flowers or dried for winter bouquets. The darker shades are the most showy when dried. Sow early in the spring, thin or transplant to one foot apart.

No. 1116. HELICHRYSUM (Everlasting)—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

Rhodanthe

Swan River Everlasting

The Rhodanthe is one of the slender-stemmed annual Everlastings. The flowers are rather bell-shaped, pink and white, and smaller than those of Helichrysum. The plants grow a foot tall and are dainty and graceful, but not showy. For small basket and vase arrangements during the winter these little flowers are charming. The flowers hang like little bells on the stems and make a pleasing and dainty cut flower either fresh or dried. Blooms in pink, white and dark red shades. The Rhodanthes are lovers of hot weather. When blooms are cut before being fully expanded and dried in the shade, they will retain their colors for years. The seed, if sown outdoors, should be planted only when the soil and air are warm. It is better not to move the plants but to thin them to stand six inches apart.

No. 1138. RHODANTHE (Everlasting)—Mixed colors.

Pkt., 10c; ¼ Oz., 30c

Statice

Sea Lavender

Statice is a popular perennial Everlasting growing two and a half feet tall. Extensively used for rockeries and borders, the panicles of the graceful minute flowers of the "everlasting" type, can be dried and used for winter bouquets. Flowers are purple, yellow or white. The Statices lend the same grace to a bouquet as does Baby's Breath as the flowers are small and are produced in great profusion in a mist-like mass of airy gracefulness. They are most effective if combined with other straw flowers in bouquets. They thrive in warm, light soils. Sow seed thinly in hotbed or sunny window, just deep enough to cover the seed. Transplant carefully and exercise care in watering. Stems are often weak and require staking. Allow the flower to dry on the stems before cutting.

No. 1139. STATICE, LATIFOLIA (Everlasting)—Mixed colors.

Pkt., 10c; ⅛ Oz., 25c

Xeranthemum

Immortelle

An interesting everlasting with purple, lavender, pink and white flowers growing two feet tall and bearing its blooms in clusters. Plants remain in bloom from early summer until late in fall and are at all times very effective. When blooms are cut before being fully expanded and dried in the shade they will retain their color for years. They are greatly prized for winter bouquets. As the foliage is light, silvery green the plants are interesting in the garden as well as for cutting. Sow in the open late in March or early April. Thin the plants to stand eight to ten inches apart.

No. 1140. XERANTHEMUM (Everlasting)—Mixed colors.

Pkt., 10c; ¼ Oz., 35c

Sweet Peas

These most beautiful of the hardy climbing annuals, are very easy to grow, and thrive under ordinary garden conditions with very little care, but a little extra care will be amply repaid in larger and earlier blooms and brighter colors. The climate of the Pacific Coast is ideal for their best development, and in no other locality will they produce blooms in such wonderful profusion and perfection.

On the Pacific Coast, where the ground does not freeze to any depth, the best time to plant is in November. They will apparently make very little growth during the winter, and it is better if the tops do not show above the ground until spring, but they will make a remarkable amount of root growth which will induce a strong growth of vines early in spring, producing better blooms and much earlier than if planted in spring. They may, however, be planted in February, March or April, and will do very well.

The location should be open, away from trees and shrubbery, where they will get plenty of sunlight and air. They will thrive on any good garden soil, but a rich clay loam will produce the brightest colors. The ground should be well drained, especially if planted in the fall. A heavy application of Morcrop Fertilizer should be spaded under and thoroughly mixed with the soil, to improve the mechanical condition and make it warm and porous and if the seed is planted in the fall the ground should have a mulch of straw or lawn clippings to protect it from the cold, keep it from packing, and to induce early growth in the spring. The seed should be planted about one inch apart in furrows; if planted in the fall the furrows should be five inches deep; if planted in the spring they should be from two to four inches deep; early plantings should be deeper than late plantings. Early in spring, if there is a hard crust on the ground, break it by raking over the rows. As soon as the plants are up cultivate frequently, and thoroughly. An occasional top-dressing of Morcrop Fertilizer will be beneficial.

As they grow six to eight feet high, they require a trellis of some sort, and six-foot poultry netting makes a fine support and is easy to construct. They require considerable water, and it should be applied to the roots only; do not sprinkle the foliage. All of the blossoms should be picked each day; otherwise they will go to seed, and stop blooming. The more flowers you pick the more new ones will appear.

We offer 35 Splendid Varieties. All your favorite colors are listed so that you can have "your shades" in profusion.

Each of these varieties has unusual merit and are our selection from the hundreds of sorts offered by Sweet Pea breeders.

Price, Any Variety
Pkt., 10c; Oz., 30c

No. 1024. AMERICA—Ivory, striped crimson, large.

No. 1165. AUSTIN FREDERICK—Giant waved lavender.

No. 1005. ASTA OHN—Rich lavender, suffused mauve.

No. 1194. BARBARA—Fine soft salmon, very pretty.

No. 1114. BLANCHE FERRY—Rose pink, white wings.

No. 1166. COMMANDER GODSALL—A wonderful violet blue.

No. 949. COUNTESS SPENCER—The favorite rose pink.

No. 1042. DOBBIE'S CREAM—An unusual deep primrose.

No. 1193. DOBBIE'S BLUE PICOTEE—White, edged violet blue.

No. 1195. ELEGANCE—Blush lilac, suffused delicate pink.

No. 1198. ELFRIDA PEARSON—Large, shell pink, waved.

No. 1072. FIERY CROSS—Orange cerise, very fiery.

No. 1118. HAWLMARK PINK—A wonderful rich, rosy pink.

No. 1196. HAWLMARK CERISE—A new creamy rose cerise.

No. 1045. ILLUMINATOR—Salmon orange, overlaid cerise.

No. 1197. JEAN IRELAND—(Picotee), fine cream, edged rose.

Sweet Peas—Continued

No. 1192. KING MAUVE—Large, waved mauve, good stems.

No. 1009. KING EDWARD—Deep crimson, the favorite red.

No. 1041. KING WHITE—Large, waved white, always good.

No. 1190. MAGIC—Rosy, amethyst, shaded blue, a novelty.

No. 1119. MASCOTT'S WHITE — Solid white, like a snowbank.

No. 1011. MRS. ROUTZAHN — Apricot or straw, suffused pink.

No. 1120. MRS. TOM JONES—Bright delphinium blue, new.

No. 1121. PICTURE—Flesh pink, suffused apricot, very good.

No. 1002. PRIMOSE SPENCER — Best clear primrose, nicely waved.

No. 1191. RENOWN—Rich rosy carmine, on long stems.

No. 1113. ROYAL PURPLE—The finest purple, very intense.

No. 1122. ROYAL SCOT—Orange scarlet, has lots of fire.

No. 1051. SENATOR—Very light heliotrope, striped claret.

No. 1189. SUNSET—Rich rose on amber ground, very showy.

No. 1123. TANGERINE IMPROVED—A very rich glowing orange.

No. 1124. THE CARDINAL — Intense poppy scarlet, large, waved.

No. 1125. VALENTINE—Blush pink, waved, one of the best.

No. 1046. VERMILION BRILLIANT—Fine scarlet, good stems.

No. 1188. WARRIOR—Deep bronzy maroon, almost black.

No. 1049. WEDGWOOD—Azure blue, the best light blue.

No. 1007. MIXED SPENCER—The most popular colors mixed.

Pkt., 10c; Oz., 25c; ¼ lb., 75c; Lb., $2.25

Annual Vines

One often desires a vine to shade a porch or hide an unsightly fence and one that will grow quickly. It is at such times that the value of annual vines is appreciated. There are coarse sorts and dainty ones—types for every use. Among the most popular are those described below.

Canary Bird Vine

This is a rapid growing annual vine with canary-yellow blossoms resembling a bird with wings half expanded. The flowers are arranged in sprays. The plant is used to cover trellises, arbors and to screen unsightly places. Except for its deeply cut petals and lobed leaves its foliage resembles Nasturtiums.

Start the plants indoors in February, move them into individual pots as soon as large enough and transplant outdoors after all frost danger is past. Can also be started outdoors in the late spring. Rapidly reaches a height of 15 feet in warm weather.

Sow the seed in light, rich soil, where it will get plenty of sun, allowing plants to stand about 8 inches apart. Blooms from June to November.

No. 148. CANARY BIRD VINE (Tropaeolum)—Yellow.

Pkt., 10c; ½ Oz., 25c

Cardinal Climbers

The Cardinal Climber is a vine of great charm because of its fiery, cardinal-red, Morning Glory like flowers. The flowers are about 1½ inches in diameter and borne in clusters. The leaves are deeply laciniated, resembling

those of a fine Japanese Maple. The vines grow 15 to 25 feet and are covered with scarlet flowers all season long. The seeds had best be soaked in tepid water for a day before planting.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established thin to one foot apart. Plants delight in a sunny situation along fence or trellis.

No. 1127. CARDINAL CLIMBER—Crimson scarlet.

Pkt., 10c; ⅛ Oz., 45c

Cobaea

Cup and Saucer Vine

COBOEA SCANDENS

This rapid growing vine is most attractive. Although not an annual it is so treated in the north. The vines attain a height of 30 feet. The dark color and refined character of its foliage, together with its bell-shaped flowers, render it a very satisfactory vine for covering broad areas. The flowers are not conspicuous, because of their modest colors and because they are hidden by the foliage, their form, however, is pleasing and they, unlike the moonflower, are open during the day. Blossoms are green at first, but change rapidly to a beautiful violet blue. They are followed by plum-shaped fruits. Sow the seeds indoors late in February or early March, one to a pot. Press them into the soil edgewise, as they are large and flat, and germinate poorly when placed broad side down. Transplant when frost danger is past into very rich soil. Thrives best when watered freely.

No. 120. COBAEA SCANDENS—Purplish blue.

Pkt., 10c; ¼ Oz., 25c

Don't forget some packets of seed of annual vines to drape the fences, clothes poles and other unsightly spots, morning glories, cypress vines, cardinal climber, climbing nasturtiums, wild cucumber and other favorites.

Cypress Vine

CYPRESS VINE

This is one of the daintiest of vines, having fine, fern-like foliage and being dotted with small, star-shaped flowers—orange, scarlet and white in color. Very desirable for covering small ornamental trellises on account of its graceful foliage. Quite satisfactory also for growing indoors during the winter months. Grows 15 to 20 feet high.

The seeds should be scarified by cutting or filing the shell and soaked in warm water before planting because the shell is so hard that germination is slow or doubtful otherwise. Thrives best in light soil and sunny exposure.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding. If started indoors, young plants should be transplanted to open after ground has become warm and the weather thoroughly settled.

No. 1185. CYPRESS VINE—Mixed colors.

Pkt., 10c; ¼ Oz., 25c

Echinocystis

Wild Cucumber

ECHINOCYSTIS

The Wild Cucumber is one of our fastest growing vines. Splendid for a quick, temporary covering for trellises, fences, stumps, etc. The foliage is light green, the flowers are white and appear in profusion during July and August and are followed by an abundance of long, spiny seed pods. They vary in height from 10 to 30 feet. The seeds may be sown in the fall. If sown in the spring they should be soaked for a day in warm water. They thrive in any soil. Scarifying the seed hastens germination. Cover to a depth of about one inch with fine soil.

No. 995. ECHINOCYSTIS—White.

Pkt., 10c; ½ Oz., 30c

Gourds

Ornamental

Gourd plants are exceptionally free from insect pests. Plant them six inches apart. Do not transplant, but sow the seed where the plants are to grow. They are novel annual climbers with ornamental foliage and singularly shaped fruits which are often strangely colored and marked. In Japan the tough fiber on the inside is used for the soles of sandals. In tropical countries, the shells are dried and used for dishes and drinking vessels. They grow 10 to 20 feet high.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed, covering seed to a depth of about three times its size. Press soil down firmly and when plants are well established, thin out or transplant to prevent crowding.

No. 1132. GOURDS—Ornamental, fruited.
Pkt., 10c; 1 Oz., 40c

Ipomoea

Moonflower Vine, Evening Glory

Rapid-growing, half-hardy annuals quickly attaining a height of ten to fifteen feet, producing a dense mass of heart-shaped leaves and a profusion of beautiful large flowers which open at sunset and close in the morning. The blossoms are in delicate, gorgeous colors and delightfully fragrant.

If seeds are notched or scarified and soaked in warm water for 24 hours before planting they will bloom six weeks from planting.

Sow seed outdoors in well pulverized, rich soil after all danger from frost has passed.

No. 959. IPOMOEA (Evening Glory)—Rose lilac.
Pkt., 10c; ¼ Oz., 30c

No. 1056. IPOMOEA (Moonflower)—White.
Pkt., 10c; ¼ Oz., 25c

Kudzu Vine

(Pueraria thumbergiana)

A twining vine of remarkably rapid growth, attaining a length of 40 to 50 feet in one season from established roots, hardy, though the vines die down every winter in the Northwest. Foliage is large and lobed; purple Pea-shaped flowers in clusters, borne late in the season. A fine vine for arbors, verandas, etc., easily grown from seed.

Sow when danger from frost is past in fine, rich soil ¼ inch deep and keep moist until seeds germinate. Transplant 6 to 12 feet apart and train against a trellis, assisting the young shoots in their growth.

No. 1181. KUDZU VINE, JAPANESE—Purple.
Pkt., 10c; ¼ Oz., 30c

Morning Glory

These well known hardy climbing annuals are rapid growers making from 4 to 20 feet of vine and are well covered with foliage and pretty flowers, making them useful for covering summer-houses, verandas or other structures where quick effects are desired. Soak the seeds several hours in luke-warm water and sow in a warm, sunny location in March or April. Allow plants to stand three or four inches apart. They are not readily transplanted and thrive best in full sunshine. They bear pretty flowers in a variety of colors and tints, fully expanded only in the morning.

Convolvulus Major is the old-fashioned Morning Glory; flowers are mixed colors.

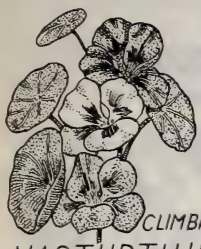
The Giant Japanese or Imperial produces larger blooms of a greater variety of colors than the convolvulus.

No. 600. MORNING GLORY (Japanese Giant)—Mixed.
Pkt., 10c; Oz., 25c

No. 41. MORNING GLORY (Convolvulus Major—Mixed.
Pkt., 10c; Oz., 25c

Nasturtium

Climbing



For easy culture, hardiness and vast variety of beautiful brilliant colors the Nasturtiums will be found one of the most satisfactory annuals. For the trailing varieties, seeds should be sown in the spring where plants are to remain, covering about one inch with fine soil, thinning to 6 inches apart when well up. Support the vines as soon as they begin to trail.

The tall varieties grow about five feet high and are splendid for covering fences, walls, steep banks, or other unsightly places. The flowers are a little larger than those of the dwarf varieties. They should be planted in spring whenever the ground is in good condition to work, in the position in which they are to remain, planting the seed about one inch deep, and the plants thinned to six inches apart. They can also be grown as pot plants for winter flowering for screens, or as trailers for hanging baskets.

Lobb's Tall

Price, Any Variety
Pkt., 10c; Oz., 25c

Lobb's Nasturtiums are remarkable for the intensely brilliant colors of the flowers, which are slightly smaller than those of other climbing varieties.

No. 1064. NASTURTIUM, BLACK PRINCE—Velvety black flowers; dark foliage.

No. 1098. NASTURTIUM, QUEEN ALEXANDRA—Variegated leaves; flowers blood red, marbled and mottled.

No. 1099. NASTURTIUM, CARDINAL—Scarlet flowers; dark foliage.

No. 1100. NASTURTIUM, EMMA ALIDA—Dark ivy-leaved foliage with golden-yellow, orange and deep scarlet laciniated flowers.

No. 1101. NASTURTIUM, FLAMINGO—A beautiful new variety with magnificent laciniated orange flowers.

No. 262. LILLY'S Tall MIXED—A splendid mixture of the best tall varieties, including all harmonizing colors.

Pkt., 10c; Oz., 15c; ¼ Oz., 50c

Tall or Climbing

Price, Any Variety
Pkt., 10c; Oz., 25c

No. 1059. NASTURTIUM, CHAMELEON—Quite unique, each plant bearing flowers of a great variety of colors and markings.

No. 1061. NASTURTIUM, VESUVIUS—Salmon-rose, dark foliage; an excellent variety.

No. 1062. NASTURTIUM, TALL IVY LEAFED—Mixed. The leaves resemble English ivy. The flowers are of a distinct form and in a great variety of colors.

No. 1060. NASTURTIUM, KING THEODORE—Very deep crimson, nearly black; dark foliage.

No. 906. NASTURTIUM, PEARL—Cream white, or primrose.

Scarlet Runner Bean

Popular for both ornamental and culinary purposes. This bean has attractive Pea-like flowers of a brilliant scarlet that are followed by an abundance of crops of edible beans. The plant is of easy culture. Plant the seeds at the base of the trellis upon which they are to grow, the latter part of April or early May and thin the plants to stand 4 to 6 inches apart. They often grow 10 to 12 feet tall. A light, warm, loamy soil, lightly fertilized and situated in a sunny location is most suitable. Cover the seed about 1½ inches deep with fine soil well pressed down. Cultivate frequently but lightly. Do not work among vines when they are wet, as it is liable to cause rust.

No. 2001. SCARLET RUNNER BEAN—Scarlet.

Pkt., 10c; ½ Lb., 25c

You can start snapdragons in a cold room almost any time with good results. They like to start slowly and gather strength and a room which is just about freezing will do well for them for a month or more.

Thunbergia

Black Eyed Susan

THUNBERGIA

A very beautiful, rapid growing annual climbing vine with attractive green foliage, growing about four feet long and used extensively for window boxes, hanging baskets, and for covering low trellises and fences.

The plants prefer a sunny situation and bloom profusely throughout the entire season until frost. The blooms are pure white, orange, buff, etc., with large dark eyes, and of each color there is a variety with white eye and also with black eye—the latter is often called "Black-eyed Susan."

Sow seed outdoors in well pulverized rich soil after all danger from frost has passed, covering seed to a depth of about 3 times its size. Press soil down firmly and when plants are well established thin out or transplant to prevent crowding. If started indoors young plants should not be transplanted to the open until after the ground has become warm and the weather thoroughly settled.

No. 1153. THUNBERGIA—Large Flowering, mixed colors.

Pkt., 10c; ¼ Oz., 50c

Wistaria

Chinese

WISTARIA

The well-known hardy perennial vine of luxuriant and rapid growth, bearing, during the spring, immense panicles of fragrant blue flowers in great profusion, frequently blooming both in spring and fall. An extremely graceful climber. For trellis and arbor work no other vine can surpass it. Grows readily from seed but plants do not bloom until well established. Often attains a height of 25 feet. Foliage, light green.

Seed may be sown outdoors early in spring in a rich, mellow loam or plants may be started indoors, or in a hot bed during winter. When plants are 1 foot high, transplant to permanent, sunny location.

No. 1183. WISTARIA (Chinese)—Blue.

Pkt., 10c; ¼ Oz., 50c

The inexpensive feature of packet flower seeds is well illustrated below. All the flowers in the picture were grown from a 10c packet of Lilly's Empress Candytuft.

Lawn and Golf Mixtures

The successful establishment of a good turf whether for lawn, golf course, recreation park, etc., depends upon careful preparation and the proper fertilization of the soil and the selection and timely planting of appropriate grasses in properly balanced mixtures.

Imported Mixture

Plant 5 lbs. per 1,000 sq. ft.

An extra fancy mixture of fine leaved grasses only. Chewings Fescue, Creeping Bent, Kentucky Blue Grass, Red Top and Crested Dogstail are selected to make up the greater portion of this excellent lawn mixture. Contains no clover and should be sown thickly, as the finer leaved grasses start slowly. Sow 5 pounds per 1,000 square feet of surface. More seed makes a quicker and more satisfactory lawn, as much as one pound for each hundred square feet is often used. We recommend this mixture to those desiring the finest lawn in their neighborhood.

1-lb. Cartons, 75c; 4-lb. Cartons, $2.60: Bulk, 10 lbs. or more, 65c per lb., postpaid.

Evergreen Mixture

Plant 5 lbs. per 1,000 sq. ft.

Only the fine leaved and long lived grasses are used in this mixture, which will produce a beautiful, velvety, carpet-like lawn that will last for years. For permanence more than one-half of this mixture is made up of the two very best "Creeping habit" grasses, Chewings Fescue and Creeping Bent. An "Evergreen" lawn will remain a good lawn for years if given proper care. Just enough white clover is used to make a quick showing and act as a nurse crop for the grasses while they are becoming established.

1-lb. Cartons, 75c; 5-lb. Cartons, $3.25; Bulk, 10 lbs. or more, 65c lb., postpaid

Use SEMESAN on "Brown Patch" by drenching the affected spots. Even in its advanced stages this treatment is successful.

Nonpareil Mixture

Plant 5 lbs. per 1,000 sq. ft.

A mixture of suitable, hardy grasses selected to produce a quick lawn that will stand lots of abuse and stay green the year round. Some of the grasses will eventually become coarse and bunchy, unless it is well fertilized with Morcrop-L and cared for, but for a serviceable backyard mixture it is ideal. It is also low in price.

1-lb. Cartons, 50c; 5-lb. Cartons, $2.25; Bulk, 10 lbs. or more, 45c per lb., postpaid.

Golf Greens Mixture

Sow at the rate of 1 lb. to each 100 sq. ft.

After years of co-operation with Golf Professionals and Golf Course Architects with a view to determining the best mixture of seeds for the Greens the mixture we now offer was decided on, consisting chiefly of Bent Grasses. It quickly forms a very dense and velvety turf and when properly fertilized shows such thrift as to always make the ideal putting surface.

Price, 1 lb., 70c; Bulk, 10 lbs. or more, 65c lb., postpaid

Fairway Mixture

Sow 5 lbs. per 1,000 sq. ft.

Grasses that are suitable for fairways must not have bunching tendencies and must possess vigor of growth and power to resist drought during season when water is scarce.

Our intimate knowledge of the habits of grasses makes it possible for us to produce a mixture of fine-leaved grasses that will withstand close cutting and severe trampling and which therefore will give perfect satisfaction.

Price, 1 lb. 65c; Bulk, 10 lbs. or more, 60c per lb., postpaid

How To Make a Lawn

Since the lawn is intended to be a permanent feature of the decoration of one's home its permanence is of utmost importance and it is fitting, therefore, that one should be very thorough in each step of its preparation.

Preparing the Soil

In general, grass seeds are small and the surface seedbed need only be one inch in depth, but since the grasses as they become established, send out long lateral feeding roots it is virtually necessary that the soil be thoroughly prepared to a depth of at least 8 or 10 inches. As the ground is being spaded or plowed to the desired depth all the debris, roots, stones, etc., should be removed. Stir the ground up thoroughly, break up all the lumps and keep in mind that all the weeds which may interfere with the establishment of the lawn or which may be detrimental to it later, should be destroyed. It is a good plan to let the ground lay several weeks after it has been shaped up and prepared in order that most of the weed seeds in the soil will germinate. Weekly surface tillage will destroy these as they first appear and eliminate them from the succeeding lawn.

Fertilizing

After the ground has been spaded and shaped up in the desired manner "Morcrop" Fertilizer should be scattered evenly over the entire surface. The succeeding tillage, before planting, will thoroughly mix it with the upper layer of soil where it will be immediately available for the young grass plants and will give them that quick start, so desirable in a new lawn. The rate of application varies, but ordinarily a hundred pound sack is sufficient for that part of the average city lot, devoted to lawn. A good way to figure is to allow a hundred pounds to each 1,000 square feet of ground. This should be followed by semi-annual top dressings as outlined under "The Care of Established Lawns" in another chapter.

We are often asked what variety of grass seed So and So planted to get such a wonderful lawn when in fact the credit is largely due to the intelligent use of fertilizer in connection with good seed properly planted and cared for.

What to Sow

A mixture of several varieties of grasses ordinarily makes the best lawn. We find that all grasses have an off or rest period at some time during the year at which time very little new growth appears. These rest periods vary with different grasses as to season and by seeding a mixture the lawn always looks thrifty and fresh.

Seeding

We will assume that the soil has been thoroughly prepared and the fertilizer well mixed with the top layer of soil. Just prior to seeding, the lawn should be rolled or tamped in order to establish a firm seedbed, as the principal point to keep in mind at this stage is that a firm contact between the seed and moist soil must be established. The process of rolling firms the seedbed and causes capillary attraction of soil mixture from underneath and good, even germination is assured.

Kind of Seed

Buy the best seed you can afford, as the cost of the seed is a minor item compared to the rest of the expense connected with lawn making.

How to Sow

Sow at the rate of one pound per two hundred square feet (5 lbs. per 1,000 sq. ft. Landscape gardeners use this quantity). It is better to use an excessive amount of seed and allow nature to eliminate the weak specimens rather than to depend on the plants to spread sufficiently to take possession of the entire area. Thickly seeded lawns give little opportunity for the development of weeds, while thin stands seem to encourage the growth of weeds that may become determined competitors for the possession of the ground. Scatter the seed evenly, it is best to divide the seed to be used into two equal parts and seed one portion of it lengthwise the tract and the second crosswise. This insures good, even seeding. Immediately after sowing the seed rake the surface thoroughly to the depth of half an inch to cover the seed, and then roll or tamp it again to firm the soil around the seed in order that the seed may get sufficient moisture to germinate and grow. If the young plants happen to raise the upper crust of soil as they crowd through, it should be promptly firmed down again; this is best accomplished on light soils with a roller while on heavy soils it can easily be done by watering sufficiently to cause it to settle. Rolling a young lawn does not injure it and the surface must be kept sufficiently firm to keep it moist.

The best time to seed is during the natural growing months of spring or early fall, but in the Puget Sound region lawns can be made almost any month of the year.

Mowing

Commence mowing as soon as the grass is high enough, but never cut it shorter than two inches the first season. Repeated mowing thickens the stand and leaving the clippings where they fall is a good idea until the stand thickens if the lawn is mowed often enough so the clippings are never longer than one inch.

Watering

When it is necessary to irrigate, give the lawn a good soaking to a depth of at least four or five inches and do not repeat for several days or until it shows signs of needing more water. Daily sprinkling which wets the soil only half an inch or so does the grass very little good and is a disagreeable task at best.

THE CARE OF ESTABLISHED LAWNS

It is a mistake to allow a lawn to go in an unkept condition at any time. In order to have a uniform greensward it should be kept in a luxuriant, vegetative condition and never allowed to produce seed. There is no operation connected with plant life which is so trying upon its vitality as the production of seed.

Frequent mowing is necessary, but in using the mower the clipping should not be done so close as to deprive the plants sufficient leaf area to carry on their normal functions. Repeated mowing improves the stand. If the soil is very rich, and the growth luxuriant, it may be necessary to catch some of the clippings in a carrier and remove them, but on many soils the clippings will prove beneficial if left, providing the cutting is frequent enough.

Weeds

Occasional weeds, like plantain, dandelion, dock, etc., may appear from seeds brought by birds, wind, etc., which, if taken when they first appear, can be easily removed with a trowel or knife. Don't let them get a foothold and produce seed.

Fertilizing

To keep a lawn thrifty and have a continued, luxuriant growth it is only necessary to maintain the fertility of the soil and supply sufficient moisture for the plants. Top dressing a properly established lawn two or three times a year with "Morcrop Fertilizer" will keep it in perfect condition. It is necessary to make these top dressings carefully; spread the Morcrop on evenly over the entire surface, avoid lumps and always water thoroughly immediately after applying it. Soak the ground to a depth of six inches. Twenty-five pounds per 1,000 square feet is a safe amount of Morcrop to use which, if followed by copious watering, will show results within a week.

"A precaution that should be observed in applying fertilizers to lawns is to be careful and painstaking enough to see that every square foot, yes, even every square inch receives its share of the fertilizer mixture, for the movement of fertilizer plant foods in the soil is directly downward, and not sideways to any great extent, so that the only way to get the greatest benefit from what is used is to be sure that it is evenly distributed.

Broadly speaking, we fertilize lawns under normal conditions to produce a vigorous growth of grass; under certain abnormal conditions to help grass recover from attacks of diseases and insect pests, and in general we fertilize turf to improve its quality. Let us understand clearly that the fertilizing of a lawn and the fertilizing of a hayfield are quite different propositions. In fertilizing meadows a large growth of hay plants is what is sought; in case of lawns it is quality of turf, which involves, in addition to vigor of growth and texture, freedom from weeds. It is important that this difference be fully appreciated.

With lawns we aim to have the root systems develop near the surface to aid materially in making a dense, resilient mat which is so desirable. These roots must receive their supply of moisture and food from a limited depth of soil, which is one of the principal reasons why it is desirable to water and top-dress the lawn frequently and liberally during the summer months.

When grass is fertilized in such a way as to keep the turf in good condition on the surface the root system is composed mainly of short roots, whereas, if a lawn is starved the roots go down deeper, but the turf becomes thin and poor.

Some years ago the Rhode Island Experiment Station started a series of experiments on lawns seeded with the better grasses (bents and fescues) to determine the difference in their effect of fertilizers having a tendency to produce an acid condition in the soil and those having a tendency to produce an alkaline condition. The outstanding results of these tests may be summarized briefly as follows:

The turf on the acid reacting fertilizer plots has since the first summer been practically weed-free, of good texture and quality. The turf on the alkaline reacting fertilizer plots has always been weedy.

A striking development was the fact that the application of fertilizers containing rather quickly available nitrogen like Morcrop-L thickened the stand of grass greatly and did so in a very short time. This bears out the experience that good nitrogenous fertilizers properly applied will thicken thin stands of grass where reseeding alone will fail.

Brands and Quality

There is a great variation in the quality of different lots of Alfalfa and Clover Seed. To those people who are unaccustomed to handling or judging seed this difference is seldom apparent. The number of live seeds, the number and kind of weed seeds, and the number of immature, shrunken, broken and cracked seeds in a pound have a lot to do with fixing its value for seeding purposes.

In order to establish a standard of quality the leaders in the seed industry have resorted to the use of Brands which could be easily recognized by the buyer.

The Chas. H. Lilly Co. have followed this plan for a great many years by establishing the Brands listed below, each of which indicates a fixed value determined by careful purity and germination tests made first in their own laboratory and then verified by tests at the U. S. Department of Agriculture Laboratory.

Our leading brand is

LILLY'S *Best*

generally spoken of as L. B. Only the best seed obtainable is so branded. It is generally better than and always at least 99% pure and of the highest germination. We always recommend this brand.

Our next brand is

LILLY'S *Evergreen*

This brand is equal to and, in many cases, exceeds the purity and germination of other "best" brands of seed. Usually tests 98% pure.

Our third brand is

LILLY'S *Skookum*

This is lower both in purity and germination than the Evergreen Brand, but is still high enough in quality to comply with all the State Pure Seed Laws which require 92% purity.

Quantity prices vary with the market and it is to your interest to get the nearest Lilly Dealer's price or let us quote you direct when you are ready to buy. Samples gladly sent on request.

Inoculation

The "Inoculation of legumes is desirable. (1) If the soil has not previously borne leguminous crops. (2) If legumes previously grown on the same land were devoid of nodules. (3) If the legumes to be sown belong to a species not closely related to one previously grown on the same soil. (4) If the soil produces a weak growth of legumes, even though their roots show some nodules.

"It is significant of the relative value of pure culture inoculation that a high percentage of beneficial results is being obtained, not only where legumes new to the region are being tried, but where the ordinary legumes used in rotation have been inoculated, a phenomenon which is undoubtedly due to the increased virility of the nodule-forming bacteria resulting from the proper development of the pure cultures in the laboratory. It is also true that the crops following the inoculated legumes have in many cases shown gains not evident in the legume crop. The practice of inoculating is therefore justified where legumes are naturally inoculated, but do not seem to reach their full vigor nor to give the best results as green manure."

The above is copied from "Farmer's Bulletin 315", U. S. Department of Agriculture.

Alfalfa and Clover Seeds

Alfalfa

(Medicago sativa)

15-18 lbs. plants an acre. Under dry-farming conditions, non-irrigated, 8-12 lbs. is sufficient.

It is best to precede alfalfa for a year or two with some cultivated crop, such as corn or potatoes, to free the land from weeds. The ideal seed bed is a well-settled subsurface with a fine surface that is loose to a depth of two inches.

The best soils on the farm should be selected for the alfalfa field. It is practically useless to attempt to grow the crop on non-productive lands to improve them.

Care should be taken, particularly west of the Cascades, that alfalfa is not planted on bottom land where the water level is within 15 feet of the surface. Alfalfa roots submerged in water will inevitably die.

Alfalfa should be sown early enough to permit the plants to become well established before winter sets in.

Except under very favorable conditions alfalfa should be sown with a nurse crop. Beardless barley, rye or wheat are the best nurse crops, but should be seeded only one-half as thick as for a grain crop.

On soil where alfalfa has not been sown for some years it is always advisable to inoculate the seed with Farmogerm before planting—this costs but little and is good insurance of a crop. All seed planted west of the Cascade mountains should be inoculated.

Alfalfa should be cut for hay when the plants are well in bloom.

Varieties: The Common Alfalfa is best adapted to Northwest conditions except in a few districts where the winters are severe. In such sections Grimm is preferred to the Common. Hairy Peruvian and Cossack have both been tried in this section but failed to show any special merit. Never buy seed that is less than 99 per cent pure.

LILLY'S Best ALFALFA—This is the only grade of common alfalfa that we offer. Because alfalfa fields are left for a long time when once established, there seems to be no logical reason for using any other seed but the best.

LILLY'S Best Grade of ALFALFA is always better than 99% pure.

Single pound, price 30c postpaid

GRIMM ALFALFA—Of great value where the winters are severe and where common alfalfa freezes out. This variety has attracted considerable attention of recent years because of its peculiar branching root system and frost resistance, which makes it of great value in the sections where severe winters prevail. Its yielding power of forage or hay is no greater than that of common alfalfa, although the price of the seed is generally much higher. We handle only the best strain.

Single pound, price 45c postpaid

TURKESTAN or DRY LAND ALFALFA is very hardy and is adapted to very dry and unirrigated lands. We recommend this variety only in the dry belt where no irrigation water is obtainable.

Single pound, price 30c postpaid
Quantity prices quoted on application.

Alsike Clover

(Trifolium hybridum)

8-10 lbs. plants an acre.

Alsike Clover is most at home in northern latitudes or at high altitudes. It thrives best in a cool, moist climate. Mixed with red clover on uplands, alsike clover insures a stand on spots where red clover does not catch. Alsike clover is used mostly in mixtures with timothy or other grasses. In such mixtures it improves the hay and increases the yield. The grasses serve to support the clover and make it easier to cut and cure.

Alsike Clover will endure overflow that would kill most crops. It has been known to grow a year in water-soaked and water-covered soil and make a heavy growth. It is a good pasture plant, often remaining in a permanent pasture for many years. It is a good clover to seed in swales or on wet, natural meadows. It volunteers readily and will spread in such places.

Do not take it from the above statement that Alsike will not do well on uplands. It is particularly recommended for such by the Western Washington Experiment Station and makes a superior Hay when mixed with Rye Grasses. Alsike matures at the same time as the Rye Grass, whereas Red Clover matures earlier and is not ready to cut when the Rye Grass is just right for hay. (Continued on page 62).

LILLY'S Best ALSIKE—Better than 99% pure.

Single pound, price 40c postpaid

LILLY'S Evergreen ALSIKE—At least 98% pure.

Single pound, price 38c postpaid

LILLY'S Skookum ALSIKE—At least 92% pure.

Single pound, price 35c postpaid

Quantity prices quoted on application.

Hubam Clover

15-20 lbs. plants an acre.

An annual strain of the White Blossom variety. It is of large, erect, branching habit and grows very quickly, as much as 30 inches of new growth has been observed in 30 days. Valuable as a catch crop, as a pasture plant and as a hay crop. Beekeepers grow it for bee pasture as it yields nectar freely and blooms continuously over a long period of time.

HUBAM CLOVER—Best grade only.

Single pound, price 55c postpaid

Quantity prices quoted on application

Red Clover

(Trifolium medium)

8-12 lbs. plants an acre.

Generally speaking, Red Clover reaches its highest development in the western portion of Oregon and Washington, where under favorable conditions it may be cut three times during the year. The first crop should be cut for hay or ensilage early in June, the second for hay in August and the third for ensilage of green feeding late in the fall.

When Red Clover is to be grown on land that has been in cereals or other non-leguminous crops for several years, the seed should be inoculated. Farmogerm is the best for this purpose and its use insures a better stand.

Red Clover can be sown either in the spring or fall and generally does best with a grain crop that is not too thick, although it may be sown alone in the late summer or early autumn. This method is seldom used but is probably one of the most satisfactory ways of seeding west of the Cascade Mountains.

The soil should be well prepared and the seed must not be covered too deeply, although it must be in firm contact with the soil. Therefore, light loams or loose soils should be packed or rolled so as to keep the moisture in them available to the young clover plants at all times.

Red Clover is well suited to be sown with timothy for hay crop and should be in all hay and pasture mixtures. It is often sown alone especially in sections where the conditions are favorable to seed production.

LILLY'S Best RED CLOVER—99% pure.

Single pound, price 45c postpaid

LILLY'S Evergreen RED CLOVER—98% pure.

Single pound, price 43c postpaid

LILLY'S Skookum RED CLOVER—92% pure.

Single pound, price 40c postpaid

Quantity prices quoted on application

Sweet Clover--White

(Melilotus alba)

15-20 lbs. per acre for Hay.
25-30 lbs. per acre for Pasture.

Sweet Clover may be utilized for feeding purposes, as pasturage, hay or ensilage. It seldom causes bloat.

Sweet Clover should never be permitted to show flower buds before it is cut for hay. It is very important that the first crop of the second season be cut so high that a new growth will develop. When the plants have made a growth of 36 to 40 inches it may be necessary to leave the stubble 10 to 12 inches high.

Sweet Clover has proved to be a profitable soil-improving crop. The large, deep roots add much humus to the soil and improve the aeration and drainage. As a rule, the yield of crops following Sweet Clover is increased materially.

Being a biennial, this crop lends itself readily to short rotations. We offer only scarified seed which insures uniform germination.

WHITE BLOSSOM SWEET CLOVER—Scarified.

Single pound, price 23c postpaid

Sweet Clover--Yellow

(Melilolus officinalis)

15-20 lbs. plants an acre for Hay.
25-30 lbs. should be used for Pasture.

Yellow Blossom Sweet Clover culture is the same as White Blossom and it is especially recommended for use as pasture either alone, or mixed with grasses on dry land or on land that is so alkaline that other crops will not catch.

This variety of perennial Yellow Blossom Sweet Clover does not grow as tall as the biennial white blossom sort but it branches

closer to the ground and comes earlier in the season. These features are decided advantages in its favor and it will undoubtedly rapidly become the most popular variety of sweet clover both for pasture and hay purposes in the alkaline sections of the Northwest. We offer only scarified seed which insures uniform germination.

YELLOW BLOSSOM SWEET CLOVER —Perennial.

Single pound, price 25c postpaid

White Clover

(Trifolium repens)

6-8 lbs. per acre for Pasture.
1 lb. to 500 sq. ft. for Lawn.

This is also called White Dutch Clover. It is a perennial plant, making growth of from four to ten inches. The stems are creeping and root at the joints.

It is an excellent plant for lawns as it will grow under almost any conditions, is easy to start, and will make a nice lawn within six weeks from the time of planting. It will grow on almost any kind of soils. In sowing lawns it is always advisable to use grass seeds with the white clover as after two years the clover will become ragged if sown alone. White Clover is also excellent for pastures. It produces a forage that is well liked by all stock, is sweet, very nutritious and makes lots of milk. For pastures it should be sown at the rate of six to eight pounds to the acre in addition to other grasses. It makes a good mixture with Italian Rye Grass, Orchard Grass and Redtop. In sowing large lawns or parks use from 25 to 100 pounds per acre. The more seed the better the turf you will have.

LILLY'S Best WHITE CLOVER—98% pure.

Single pound, price 50c postpaid

LILLY'S Evergreen WHITE CLOVER—

Single pound, price 48c postpaid

LILLY'S Skookum WHITE CLOVER—

Single pound, price 45c postpaid

Quantity prices quoted on application

JUST ONE REASON WHY GOOD SEED IS IMPORTANT

The seeds of many weeds commonly found in clover seed are very small and escape notice. A pound of clover dodder has 1,641,000 seeds; common plantain 1,814,360; Lamb's quarter 604,786 seeds; Russian thistle 266,817 seeds; wild mustard 215,995 seeds; wild oats 25,493 seeds. Red Clover seed contains 313,900 seeds per pound. The Pure Seed Law requires only 92% purity. This allows more than a pound of weed to each acre. Russian thistle seed is very nearly the same size as Red Clover. Suppose this pound is Russian Thistle, as is often the case. This means you sow 266,817 Russian thistle seeds per acre. **An acre contains 43,560 square feet so there would be six weeds to every square foot and a single thistle plant will ripen 100,000 to 200,000 seeds.**

Grass Seeds

The price of grass seed is not the most important factor that should influence its purchase. Nothing is more important to the farmer than that the grass seed he sows be pure and clean. The seed should also be plump, heavy, and well ripened, so as to insure a good stand. First-class, thoroughly recleaned seed, like Lilly's, even though considerably more costly in the beginning, is really much cheaper in the end than the light, chaffy grades generally sold at much lower prices, even if the latter is free from weed seeds, which generally is not the case. Heavy, plump seed, germinating better, will produce a much greater number of strong plants. Lilly's Seeds have an enviable reputation earned by years of experience, knowledge, and up-to-date growing, cleaning and testing equipment.

For quantity prices see your Dealer or write us direct.

Brome Grass

(Bromus inermis)

15-20 lbs. per acre for Pasture in the dry land districts.

A hardy, smooth, erect, perennial usually two to three feet tall, producing strong creeping rootstocks. Primarily a dry land grass; it does best under dry farming conditions. Seeding can be done during fall or spring.

In the dry summers east of the Cascade Mountains it furnishes more green feed than any other of the true grasses. It is noted for it ability to withstand droughts and still it does well on moist soils. It is used extensively as a pasture grass in those sections and is exceeded in the quality of its herbage only by Kentucky bluegrass.

Single pound, price 28c postpaid

Crested Dogstail

(Cynosurus cristatus)

20-25 lbs. per acre for Pasture. 4-5 lbs. per 1,000 sq. ft. for Lawn. Best when used in mixtures.

It is adapted primarily to cool, moist regions like Western Washington and Oregon where it seems to thrive principally in the two extremes, hot sun and dense shade. Makes a fair lawn grass under those conditions and gives promise of becoming an important pasture grass on poor, sandy soils where no other grass will thrive. It is very nutritious and yields quite well.

Single pound, price 57c postpaid

Orchard Grass

(Dactylis glomerata)

20-30 lbs. per acre for either Hay or Pasture.

Orchard grass, also known as Cocksfoot, is one of the earliest grasses to start up in the spring, remains green during long, hot summers and late into the fall; it furnishes abundant feed, and it is fairly well liked by stock; it grows in tussocks, and therefore, does not make an even sod. but its roots penetrate to a considerable depth causing it to withstand drought better than most other grasses on light and dry soils. Perhaps the most serious fault orchard grass possesses is its tendency to become woody soon after the blooming period is over. One of its most important advantages is that it ripens exactly with red clover, and is thus eminently adapted to sowing with that important leguminous plant. It is a week to ten days earlier than timothy and is generally conceded to possess longer life both in meadows and pastures. Its ability to grow in the shade of trees is likely responsible for its name. A possible objection to orchard grass for hay in the Puget Sound region is its early maturity, being ready to cut before dry weather has set in. This, however, can be overcome by early spring pasturing.

Single pound, price 29c postpaid

Sow your Grass Seed with a **CYCLONE BROADCAST SEEDER.** The feed is automatic. You can start or stop the flow of seed instantly by the touch of a lever. The distribution is uniform and no seed is wasted.

Red Top

(Agrostis vulgaris)

12-15 lbs. per acre for Hay or Pasture.
4-8 lbs. per 1,000 sq. ft. for Lawns.

On land that is too wet for timothy, red top or herds grass, as it is sometimes called, is decidedly the best substitute for that grass. It will even thrive on land too wet for cultivation. In the west there are many valleys in which there are extensive areas of low, level land, often too wet to plow on which red top is easily started. These meadows are the reliance of the rancher for winter feed and redtop is justly accorded a high place in the favor of the stockman. Red top is preferred for sowing with timothy, because it is not so early as orchard grass and makes a more even sod. Redtop is the most variable of all the cultivated grasses. It is the best for wet land and when sown on upland is strongly drought resistant and is often used for holding banks to prevent erosion. The best form has large, erect stems, with broad, coarse leaves. This is the one generally grown for hay and pasture and the seed we offer is of this type. It makes a good sod, and bears cropping and trampling well. On account of its small seed, Redtop should have a fine, mellow seedbed and care should be taken not to cover the seed too deeply.

FANCY HULLED SEED—92% pure.

Single pound, price 40c postpaid

UNHULLED SEED—Of best quality.

Single pound, price 35c postpaid

Sudan Grass

(Andropogon sorghum sudanensis)

8-10 lbs. plants an acre.

Sudan grass is an early maturing annual sorghum plant. It is not particular about soil, but requires warm weather and must not be planted in the Northwest until the weather is well settled. Under favorable conditions only 90 to 100 days are required to mature a hay crop. Thick seeding is advisable, otherwise the crop grows too rank and coarse as the plants stool heavily and grow ten feet high if given sufficient room. Important as a fodder plant east of the mountains, where it seems to thrive on lands that are quite alkaline. It also endures excessive moisture and withstands extreme drought but on the coast it seldom proves to be a valuable crop.

Single pound, price 20c postpaid

Tall Meadow Oat-Grass

(Arrhenatherum avenaceum)

20-30 lbs. plants an acre either for Hay or Pasture.

Tall meadow oat-grass matures exactly with orchard-grass and red clover and is, therefore, adapted to sowing with these crops. It has a slightly bitter taste but stock soon become accustomed to its peculiar flavor and it is as closely grazed in the pasture as any of the other grasses.

It stands pasturing well, remains green late in fall, does not become sod bound, and thrives on drier soils than timothy, in fact, it seems to be especially adapted to light, sandy or gravelly land. It does not like shade. Height from 30 to 60 inches.

Single pound, price 35c postpaid

Timothy

(Phleum pratense)

8-12 lbs. plants an acre for Hay. For Pasture use that proportion in mixture with other pasture grasses.

One of the most universally known and cultivated grasses, growing 25 to 40 inches tall and found on nearly all sorts of soil. It is especially adapted to cool, moist soils and because the seed is usually cheap, of high germination and purity it is a general favorite with farmers. Unlike many other grasses, a few days' delay in the time of cutting makes but little difference in the quality of the hay—a very important point in a region or season where rains are frequent during the haying season. For cattle it should be cut just after it is through blooming, for horses ten to twelve days later. It does not stand grazing as well as other grasses and in some sections the best authorities advise against pasturing at all.

The importance of timothy in America is due to its rather remarkable combination of qualities, as well as its splendid adaption to the same area as red clover. Its advantages may thus be summarized:

1. It produces good yields. 2. A stand is usually secured easily. 3. The cost of seeding is less per acre than that of any other grass. 4. It seldom lodges. 5. It is easily cut and cured. 6. Its harvest period is longer than that of most grasses. 7. It is the favorite hay for horses and is in good demand.

LILLY'S Best TIMOTHY—Better than 99% pure.

Single pound, price 19c postpaid

More Timothy on Page 66

LILLY'S Evergreen TIMOTHY—At least 98% pure.

Single pound, price 18c postpaid

LILLY'S Skookum TIMOTHY—Legally pure.

Single pound, price 17c postpaid
Quantity price on application

Velvet Grass

(Holcus lanatus)

20-30 lbs. plants an acre.

Also erroneously called Mesquite and Fog Grass. A good meadow grass in dry, sandy soil, of little value where other grasses thrive. It is a perennial about two feet tall and is soft and velvety.

The hay is remarkable for its lightness, a ton of it being much more bulky than a like weight of other kinds of hay. The whole plant is covered by a growth of wool-like hairs.

Single pound, price 25c postpaid

Creeping Bent Grasses

Quantity prices on application

Puget Sound Bent

(Agrostis maritima)

3-5 lbs. per 1,000 sq. ft. for Lawns and Golf Greens. 8-12 lbs. per acre for Pasture.

The true botanical name of this valuable grass is Agrostis Maritima and its natural habitat is the lowlands adjacent to the Puget Sound and North Pacific coast. It is a close relative to True Creeping Bent, Agrostis Stolonifera, which it resembles in many ways. Though it naturally prefers a moist soil it is found likewise on dry upland or sandy soils and stands drought very well indeed. Authorities assume that its natural preference for lowland is due to its liking for lime-free or acid soils and not for excessive moisture, since it thrives noticeably during the dry fall months. On the other hand it will stand uninjured on land covered with water for several months. It is well suited for grazing purposes, to say nothing of its special qualities as a lawn and golf greens grass where it excells all other grasses. Once established it spreads rapidly by underground stems or stolons and forms a dense and permanent turf which improves with age. The plants are practically 100 per cent creeping and frequently vegetable propagation is practiced by taking up these creeping root stalks cutting them in 2-inch pieces and using them instead of seed for starting new lawns or greens.

Single pound, price $1.75 postpaid

Rhode Island Bent

(Agrostis stolonifera)

4-5 lbs. per 1,000 sq. ft. for Lawns. 8-12 lbs. per acre for Pasture.

The natural Rhode Island Bent makes up much of the pastures of New England and north Atlantic states, and it is not infrequently cut for hay. Rhode Island Bent is distinguished from red-top by its smaller size, narrow leaves, short ligule, and its peculiar open panicle, which does not close upon maturity. It grows 6 to 24 inches in height. It is a beautiful grass and makes up a large proportion of the highly esteemed South German mixed bent seed. Seed from New Zealand of the same grass is called Colonial Bent. Unlike some other grasses it thrives well on acid soils, and its turf is injured rather than improved by the use of lime.

Single pound, price $1.50 postpaid

German Mixed Bent

4-5 lbs. per 1,000 sq. ft. for Lawns. 12-15 lbs. per acre for Pastures.

A mixture of bent grasses that has been imported from southern Europe for years for making lawns and seeding golf courses. The predominating grasses in the mixture are Redtop (Agrostis vulgaris), Rhode Island Bent (Agrostis stolonifera), and Velvet Bent (Agrostis canina).

It is not nearly as desirable as Puget Sound Creeping Bent because usually only about 15% of the mixture is creeping (stoloniferous rooted), while the Puget Sound Bent is practically 100% creeping.

Single pound, price $1.25 postpaid

Nitrogen, phosphorus and potassium are plant-foods most frequently lacking. These three elements, in natural combination with others, make up those substances which are commonly spoken of as ammonia, phosphoric acid and potash. It is the lack of one or more of these plant-foods which usually limits the size of crops produced.

Blue Grasses

Quality prices on application

Kentucky Blue Grass

(Poa pratensis)

4-5 lbs. per 1,000 sq. ft. for Lawns.
20-25 lbs. per acre for Pastures.

Its palatability to all classes of stock, the evenness of the sod it forms, the beautiful color of its verdure, and its increasing productiveness with age, if properly handled, all conspire to make bluegrass the king of pasture grasses. Were it not for its habit of remaining dormant during the dry, warm months of summer, the length of time required to secure a good stand of it, and its comparative low yield of forage, blue grass would indeed leave nothing to be desired as a pasture grass on soils to which it is adapted. These objections to bluegrass are all real and the very general dependence on bluegrass for pastures in the past led many American farmers to the conclusion that they could not afford to keep their good lands in pasture. One of America's best authorities on the subject says it takes three years under the best conditions to establish a stand of blue grass and that ten to twenty years are required to get a first class bluegrass pasture such as Kentucky stockmen boast about. In the Northwest it is a desirable ingredient in pasture mixtures, producing much succulent feed both spring and fall.

Single pound, price 40c postpaid

Canada Blue Grass

(Poa compressa)

20-25 lbs. per acre for Pasture.

Canada Blue Grass is a hardy perennial grass of value for pasture purposes on the sandy soil, in the northern tier of States and Canada, producing an abundance of creeping root stocks by which it forms a close turf. It rarely attains a height of more than 24 inches, usually growing from six to eight inches high. It is dark blue in color and resembles Kentucky Blue Grass, to which it is related.

Its value is almost entirely as a pasture grass, since it does not grow to a sufficient height to give a profitable yield of hay. The hay which it does produce, however, is of excellent quality.

Single pound, price 48c postpaid

Fescues

Quantity prices on application

Chewings Fescue

(Festuca fallax)

30 lbs. per acre for Pasture.
1 lb. for 200 sq. ft. for Lawns.

Chewings fescue is a small, hardy, low growing grass producing very fine dark green leaves, which rarely exceed 6 inches in height and in growing have a dense turf forming habit.

As a lawn grass, the most attractive and distinctive features of Chewings Fescue are: Its very fine leaves. The short, dense growth of these leaves. Their dark green color. The good sod the grass produces—all of which contribute to that fine carpet-like effect so desirable. Chewings Fescue is a permanent grass and its turf improves with age. It never grows coarse and never produces a stubble, even though cutting of the greens be delayed. The plant is of hardy constitution and thrives on a wide range of soils, from those of a poor light, sandy nature to heavy loams, and like other grasses, the better the condition the better it grows. A special point in its favor, is its durability on the poorer types of gravelly and sandy soils.

NOTE: Lilly's Evergreen Lawn Grass Mixture contains a large proportion of this wonderful lawn grass.

Single pound, price 45c postpaid

Hard Fescue

(Festuca durinscula)

20-30 lbs. per acre for Pasture. 4-5 lbs. per 1,000 sq. ft. on Lawns and Golf Fairways.

Differs from sheep's fescue in having harsher, firmer and thicker blades and forms smaller tufts. Thrives in the shade and of late is being used for the "rough" on golf courses. Deep green in color, it grows to the ground and stands clipping and pasturing well. Reaches a height of 20 to 25 inches.

Single pound, price 36c postpaid

Tall Meadow Fescue

20-30 lbs. per acre for Hay.

A special strain of Meadow Fescue that has been selected with a view of perfecting a heavy producing hay plant in the sections where Meadow Fescue thrives. It grows taller and more dense than the regular variety and therefore, produces heavier crops of hay.

Single pound, price 35c postpaid

Meadow Fescue

(Festuca pratensis)

20-30 lbs. per acre for Hay or Pasture.

In Oregon, Washington and Idaho meadow fescue is regarded with considerable favor. On the basaltic wheat producing soils of eastern Washington and Oregon when a good stand of it is secured, it is undoubtedly one of the best grasses, both for hay and pasture. When used for hay it should be cut when in bloom, for then its nutritive value is three times greater than when the seed has ripened. If the difficulty in securing a good catch could be mastered it would likely become the standard for that section. After the frost has killed the native grasses, stock may be pastured on Meadow Fescue, thus reducing by several weeks the period of dry-lot feeding. Meadow Fescue is sometimes called English Blue Grass, which is incorrect and confusing as it is not related to the blue grasses.

Single pound, price 35c postpaid

Sheep's Fescue

(Festuca ovina)

20-30 lbs. per acre for Pasture. 5 lbs. per 1,000 sq. ft. for Lawns on light or sandy soils.

Sheep's Fescue is a bunch grass, forming dense tufts three to six inches in diameter, with numerous stiff, rather sharp, nearly erect, bluish gray leaves, two to four inches long. The plant grows 20 to 25 inches high. While the grass is decidedly tough and has a tendency to get woody it is nutritious and eagerly eaten by sheep and to a less degree by cattle. It does fairly well on light, sandy soils where the other more valuable pasture grasses fail.

It is ideal for use on the "rough" of golf courses.

Single pound, price 35c postpaid

Rye Grasses

Quantity prices on application

Domestic Rye Grass

20-30 lbs. per acre for Hay or Pasture.

A native species of Rye Grass in many ways just as desirable as the imported varieties. Usually not so high in price. Produced mostly in Western Oregon where it has all the habits of a true perennial.

Single pound, price 18c postpaid

English Rye Grass

(Lolium perenne)

20-30 lbs. per acre for Hay or Pasture.
5-8 lbs. per 1,000 sq. ft. for Lawns.

Frequently referred to as perennial rye grass. It is a tufted short-lived perennial which grows 1½ to 2 feet tall and its principal use in this section has been as an ingredient in pasture mixtures. It comes quickly after seeding and is highly relished by stock, being preferred to most other cultivated grasses.

Single pound, price 21c postpaid

Italian Rye Grass

(Lolium italicum)

20-30 lbs. per acre for Hay or Pasture.

Italian rye grass is practically an annual, but by allowing it to ripen seed before cutting the hay, which is perfectly safe to do as far as quality is concerned, it reseeds itself and is thus to all purposes a perennial. In pasture plots not too closely cropped this reseeding goes on naturally and for that reason Italian rye-grass is becoming quite popular on the Pacific Coast.

Single pound, price 20c postpaid

Pacey's Rye Grass

5-8 lbs. per 1,000 sq. ft. for Lawns.

Closely related to English or Perennial Rye Grass. Valuable in lawns and where quick results are desired. It is a short seeded type and evidently is a selection of the English species.

Single pound, price 25c postpaid

Pasture and Hay Mixtures

These Pasture Mixtures contain the correct early, medium and late grasses to supply pasture continuously during a long season; also bunch, deep rooting, and creeping grasses to form a tough and lasting turf. The Hay Mixture is composed of tall-growing grasses which will mature about the same time, and will produce the maximum amount of hay of the best quality.

No. 1 Pasture Mixture

Plant 20-30 lbs. per acre.

Especially prepared for wet bottom lands. Contains mostly such desirable seeds as Timothy, Alsike Clover, Rye Grass, Red Top and Meadow Fescue.

Per lb., 25c; 50 lbs., $10.50; 100 lbs., $20.00

No. 2 Pasture Mixture

Plant 20-30 lbs. per acre.

For benches and uplands, especially useful for sowing on logged-off land. Contains lots of Red Clover, Meadow Fescue, Timothy and Rye Grass, together with Red Top, etc.

Per lb., 25c; 50 lbs., $10.50; 100 lbs., $20.00

Why Mixtures?

Whether for hay or pasture, there are many advantages to be obtained by sowing a mixture. Each grass lives, to a great extent, on different constituents. The season that would completely check the growth of one variety of grass will act as an encouragement to some other variety, so that the complete failure of a mixture is practically impossible. The mixture must, of course, be so composed as to make a solid turf. If a large portion of tufted or bunchy grasses are used bottom grasses of more spreading habit must be intermingled to fill the spaces and make a compact growth. It is also desirable to use those kinds that make a rapid growth after each cutting. In a mixture for hay such grasses should be used that will all mature about the same time, while for a pasture mixture the chief requisite is that early, medium and late varieties should be used together, to furnish continual grazing the entire season.

Hay Mixture

Plant 20-30 lbs. per acre.

A splendid mixture, producing hay of fine quality and maturing evenly. Timothy, Red Clover, Orchard Grass, Rye Grass, Red Top, Meadow Fescue, etc., predominate in this mixture.

Per lb., 25c; 50 lbs., $10.50; 100 lbs., $20.00

PREPARATION OF SEEDBED FOR FARM GRASSES

It is important that the soil should be well compacted so that the surface layer will retain the moisture well in order that the young seedlings will not perish from lack of available moisture, before they become well rooted. It is not essential that the surface be thoroughly pulverized by a roller or plank drag, in fact, the surface is best left covered with small lumps about one inch in diameter, which afford considerable protection for the young plants and helps retain the moisture.

Seeding should be sufficiently early in the fall to allow the development of strong plants before severe winter weather sets in, or early in the spring so that the seedlings are sufficiently well rooted to withstand summer droughts, as the moist, cool spring weather is much more favorable to the establishment of young grass seedlings than the hot, dry summer weather.

Nurse crops are valuable for seeding with grasses and clovers in that they offer protection to the tender, young seedlings from sun and wind and because they shade the ground somewhat and have a tendency to conserve surface moisture which is vitally necessary to the young plants. The excessive and injurious growth of weeds is also held under control. It is generally best to cut the nurse crop for hay as early as practicable to prevent the possibility of a struggle between the nurse crop and the grass seedlings for moisture and plant food which generally results in injury to the grass or legume crop one is trying to establish.

Seed Grains

Prices on Seed Grains necessarily are subject to market changes and are dependent, also, upon the quantity purchased. The prices shown in this section are postpaid prices on very small quantities. For quotations in sack lots or more consult your regular Dealer or write us direct.

Barley

Barley likes well tilled soil and for that reason should follow a cultivated crop. The soil should be plowed in the late fall or early spring six to eight inches deep and a good seed bed prepared by harrowing or discing till the surface is loose, but the sub-surface down two or three inches is reasonably firm. Spring barley should be seeded as early as the ground is fit to work. This varies from the middle of February for the drier uplands to May 1st in the wetter lowlands. One bushel (48 lbs.) per acre is sufficient to sow in the drier sections of the Northwest, but as much as two bushels (96 lbs.) should be seeded in the fertile lowlands of the coast. Cut for hay while the kernels are in the dough stage and for grain when the joints of the straw turn brown before fully ripened.

LILLY'S "Success" BEARDLESS BARLEY—An exceptional strain of true beardless spring barley that was perfected by the Washington State College. Very heavy producer. Good for hay or grain.

Single pound, price 10c postpaid

LILLY'S White HULLESS BARLEY (Beardless). It threshes out like wheat and grows beardless. More productive and two weeks earlier than wheat, making it a splendid spring sown crop in some sections.

Single pound, price 10c postpaid

LILLY'S Common BEARDED BARLEY—A white six-rowed variety of bearded barley that is still very popular. It is sufficiently hardy that it can be sown in the fall in sheltered localities west of the Cascades.

Single pound, price 10c postpaid

Quantity prices on application

The only way to protect your seed investment and insure your crop is by sowing dependable seeds of highest germination. We have them. Order early.

Buckwheat

Buckwheat may be grown on rough, poorly prepared land, but it will respond to better treatment with an increase in production. The land should be plowed early to allow time for the vegetation or manure which is plowed under to decay. Occasional harrowing before planting is advisable to conserve moisture. Seeding should be delayed until the soil is warm, as buckwheat is very sensitive to frost. June is the month to seed. Shallow seeding with a drill, 50 lbs. per acre, gives the best results. The variety known as Japanese Buckwheat is hardier than other varieties for the Northwest. The crop is usually harvested with a binder shortly after the first blooms have matured seed. It is well to cut in early morning or on cloudy days to prevent shattering. This crop, in the Northwest, is used principally for bee pasture, but in the real Buckwheat sections it is grown for grain which is ground into flour and makes excellent hot cakes.

Single Pound, price 15c postpaid

Flax

Flax is easily injured by frost, but is adapted to the cool northern part of the temperate zone.

The land for flax should be plowed as long before seeding as possible to allow the seed bed to settle together. Just before seeding the ground should be harrowed so that a shallow mulch about an inch deep is obtained. The seed should be drilled one to two inches deep at the rate of 30 to 70 lbs. per acre for seed, or 50 to 110 lbs. for fiber. It should be planted about the same time as corn or slightly later.

Single pound, price 20c postpaid

Seeds in quantity are cheaper if shipped by freight. Prices gladly quoted on request.

Oats

Oats may be broadcasted with better results than wheat or barley. Some farmers sow them on stubble land and then disc them in, but this is not considered advisable, for oats will respond to thorough seed bed preparation by increased yields which will well pay for the extra labor. Oats cannot be grown in arid sections where wheat and rye will still produce a crop. It has a vigorous, spreading root system, and will do better on sod or newly cleared land than either wheat or barley. It is best to fall plow, then disk in spring and seed with a drill.

Forty to sixty pounds of seed per acre will produce more grain on the drier uplands than heavier seeding, but 80 to 100 pounds may be used with profit on the bottom lands.

LILLY'S Gray Winter OATS—Especially valuable for fall seeding, grows tall, has stiff straw and yields heavily. Good for seeding with Gray Vetch.

Single pound, price 10c postpaid

LILLY'S Abundance OATS—Introduced from Scotland and a proven yielder on heavy soils. Medium height, erect white seeded and medium early. A spring grain.

Single pound, price 10c postpaid

LILLY'S Victory OATS—Excels all other for yield on light soils. The quality also is fine. Habit is erect and seed white. Sow in the spring.

Single pound, price 10c postpaid

LILLY'S Swedish Select OATS—A heavy strawed, very productive variety adapted to general conditions on the coast. This white spring oats is very popular in all the oat growing sections.

Single pound, price 10c postpaid

LILLY'S Banner OATS—A white seeded, spreading headed spring oats that is too well known to require much description. A very heavy yielder.

Single pound, price 10c postpaid

LILLY'S Black Alaska OATS—A black seeded spring oats with heavy straw and much foliage. Good to sow with vetch or peas and fine for hay or green feed.

Single pound, price 10c postpaid

LILLY'S Skookum OATS—A selected white oats intended for use as hay, as no particular attention is given to keeping the strain pure.

Single pound, price 10c postpaid

Quantity prices on application

Rye

Rye has been aptly called the "Grain of Poverty" because it is better adapted to poor soils than other grains. This fact should not prevent its culture on fertile soils where it will produce enormous crops of forage, pasture or grain. It is very hardy, and where sown early in the fall makes good late fall, winter and spring pasture. It should not be pastured until after it starts to joint and if intended for pasture should be sown quite thick. The rate of seeding varies, 80 to 200 pounds, depending on the nature of the soil and the purpose of the crop.

Where the rye is to be used primarily for pasture on the better soils one or two pounds of Dwarf Essex Rape to the acre will add to the value of the pasture, but on ordinary upland soils, it will not be of much value. Rye should be seeded a little heavier for pasture than for other purposes.

Rye is not yet raised to any extent in Western Washington for grain, but some sections are beginning to grow it for that purpose. Where more rye is grown than is needed for other purposes it may very well be left for seed.

LILLY'S Rosen RYE—Introduced by the Michigan State College from Russia; this variety has taken the rye growing sections by storm, heavy yielding, large seeded, high quality rye. The best winter variety by far.

Single pound, price 10c postpaid

LILLY'S Common RYE—A selected strain of the common fall rye that has been grown in this country for years.

Single pound, price 10c postpaid

LILLY'S Spring RYE—This strain was perfected for us by the Washington State College and is grown for us under their supervision. A good yielder and a valuable addition to our list of grains.

Single pound, price 10c postpaid

Quantity prices on application

Speltz or Emmer

Apparently a species of wheat which retains its hull when threshed and resembles beardless barley when growing. It is very hardy, though not grown much commercially. Does quite well on poor soils and likes warm, sheltered locations. Culture same as for wheat.

Single pound, price 10c postpaid

Quantity price on application

Wheat

Wheat is the standard grain crop of the Northwest. It is grown under wide variations of temperature, elevation and rainfall. Fall wheat should be drilled in at the rate of from 45 to 90 pounds per acre on a rather loose, cloddy seed bed. Spring wheat does better when drilled in early on a seed bed that is rather firm below the first two or three inches. Harrowing wheat is of doubtful value unless the ground is badly crusted or foul with mustard or other weeds. As a rule, winter wheat yields more than spring wheat. For silage or hay, wheat should be cut in the dough stage, but for grain it should be well matured.

LILLY'S Pedigreed Sun WHEAT—A remarkable variety of winter wheat. It is red seeded, smut and rust resistant and a heavy yielder. It is beardless.

Single pound, price 10c postpaid

LILLY'S Red Russian WHEAT—A late maturing variety of winter wheat, producing heavy yields and dense foliage. Matures late.

Single pound, price 10c postpaid

LILLY'S Marquis WHEAT—Extremely early and productive as well as hardy. Straw is stiff, seed is red, heads long and free from beards. A spring wheat.

Single pound, price 10c postpaid

LILLY'S Bluestem WHEAT—The popular Pacific Coast strain of a valuable white seeded wheat. Mostly used as a spring wheat but will stand fall seeding in sheltered sections.

Single pound, price 10c postpaid

Quantity prices on application

Millet

Millet is used as a catch crop where some other crop has failed, as it is one of the quickest crops to mature. It requires hot weather to germinate, and produces a good crop when planted as late as June or July. It should be planted shallow, about one inch deep, on a rather firm seed bed.

Millet makes very rich hay if cut just as the last heads are out of the boot. For seed it should be cut rather green (the leaves and stems are still green after the seed is mature) and allowed to cure in the bundles, which should be shocked in bundles two and two.

GOLDEN OR GERMAN MILLET—Medium early, yellow seeded, fine for hay or forage, also a heavy seed producer.

Single pound, price 20c postpaid

JAPANESE MILLET—Often grows six feet tall and yields enormous tonnage of hay and forage, sometimes called billion dollar grass.

Single pound, price 20c postpaid

SIBERIAN MILLET—Best for localities having hot weather, resists heat and drought well, produces abundantly.

Single pound, price 20c postpaid

HUNGARIAN MILLET—Earlier than Golden Millet and less productive of seed, but a splendid forage crop. Has slender stems and much foliage.

Single pound, price 20c postpaid

YELLOW HOG MILLET—The best strain of broom corn millet; yields seed in great abundance. Forage is rather coarse.

Single pound, price 20c postpaid

Quantity prices on application

LILLY'S
BEST
Red Clover
Is always better than
99% pure

LILLY'S
BEST
Alsike Clover
Produces bumper crops
on lowlands

LILLY'S
BEST
Timothy
For big hay crops
and fine pasture

LILLY'S

1000 HEADED

Kale

Supplies Green Food during the winter for cows, poultry, etc.

LILLY'S

DANISH SLUDSTRUP

Mangel

Immense reddish yellow roots, big yielder

LILLY'S

MINNESOTA No. 13 Corn

The best yellow field corn for the Northwest

Forage Crop Seeds

The mild weather, climate and abundant rainfall of Western Oregon and Washington make it almost an ideal region for the production of forage crops both for green feeding and winter use. By the judicious selection and planting of crops green or succulent food may be provided for the dairy cow, laying hen or other farm animals during practically the entire year. That a much greater amount of feed can be obtained from the same area of land by this system as compared with pasturing is a fact well recognized by the progressive farmer. Much of the tillable land of this region is now very valuable. As values advance beyond the limit where farm land may profitably be used for pasture and it becomes necessary for the small farmer to keep the maximum number of stock upon his few acres of tillable land, the growing of forage crops becomes of vital importance.

Root Crops are one of the most important classes of all farm seeds, yet they are greatly neglected in many sections of this country. Their high food value makes them very desirable for stock-feeding all the year-round. They are easily stored throughout the winter.

It is a regrettable fact that Farmers and Stock raisers in this Western country do not fully appreciate the great value of Mangels for feeding Cattle, Sheep and Hogs. In Great Britain and in fact all other European countries Root crops are grown on a large scale on every farm. Mangels are considered indispensable where stock of any kind is kept. From an economical point of view the Mangel crop is one of the most profitable on the farm as is amply demonstrated by the immense yields which are produced from an acre at very little outlay either in material or labor.

Artichoke

Jerusalem

Plant 6-8 sacks per acre.

A tuberous-rooted sunflower-like plant that thrives on any soil and is grown for the food value of its tubers. All kinds of farm animals seem to be fond of them. They are propagated the same as potatoes, the seed tubers often being cut to single eyes. Leave the matured tubers in the ground until wanted, frost does not injure them. If grown for hogs let them do their own digging. Established fields will volunteer crops for years if not "hogged out" too closely. Used also in a limited way, for human consumption as a salad.

JERUSALEM ARTICHOKE — Season March 1st to May 15th.

Per pound, 10c postpaid

Quantity price on application

Stock Carrot

1 oz. for 250 feet of row. 2½ lbs. plants an acre.

Culture same as for table use except that more space is required in the field. They keep well and make excellent stock feed.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; 1 lb., 90c

LARGE WHITE MASTODON—Creamy white in color, of immense size and often producing 25 tons per acre.

IMPROVED SHORT WHITE—Roots 7 to 9 inches long, smooth, heavy at the shoulder, and very productive.

WHITE BELGIAN—Smooth, well shaped, tapered roots, greenish-white in color, heavy yielder.

LARGE YELLOW BELGIAN—Is similar to the above, but orange color; said to be richer.

Field Corn

Plant 15 lbs. per acre in hills. 20-25 lbs. in drills for fodder.

The earlier varieties of field corn are best adapted to Northwest conditions, planting in drills gives the greatest yields and the best plan is to plant rather early and take a chance on a spring frost rather than to chance freezing in the fall. Fertilize freely and cultivate often. The best yields are obtained if plenty of room is given the rows. The corn plant develops a great number of small fibrous roots just below the surface of the ground which spread in all directions for several feet. Because of this habit corn should be laid by when it is two feet high and the last cultivation should be rather shallow.

The field for corn should be plowed in late fall, about eight inches deep, and left rough. If it is not possible to fall plow, early spring plowing should be somewhat shallower and should be harrowed at once. Just before planting, a seed bed should be prepared with disk and harrow to a depth of about three inches. It is important to do this just before planting to give the corn an even start with the weeds.

Corn should be planted until the ground begins to get warm. The average date to plant is May 10th. This may vary from April 15th to June 1st in different sections of the Northwest. For silage some prefer to drill the seed in rows 3½ feet apart with plants 8 to 15 inches apart in the row. Better cultivation can be given if the corn is planted in hills 3½ feet apart each way. For seed production there should not be over two or three stalks in a hill.

The corn field may be harrowed once or twice before the corn is large enough to cultivate. This will keep the soil loose and kill small weeds as they are coming up, and will reduce the number of cultivations required.

Corn is raised in the Northwest primarily for silage, but it may be shocked and fed as fodder or cribbed and fed as grain in the sections of longer seasonal growth.

Price, any variety, per pound, 20c postpaid
Quantity prices on application

MINNESOTA No. 13—Is considered the best yellow dent variety for the Northwest. It is early maturing, heavy yielding and is admirably adapted to our conditions.

MINNESOTA No. 23—One of the earliest varieties of yellow dent, sometimes called white cap dent.

RED COB ENSILAGE—A special variety grown for fodder and ensilage and not for grain.

PRIDE OF THE NORTH—Early maturing, heavy yielding, long kerneled yellow variety, recommended for the Northwest.

CHAMPION WHITE PEARL—A large, late white dent corn, suitable to favored sections.

KING PHILLIP—An early maturing variety; the kernels are slightly dented and mature hard and flinty, stalks are large, among the earliest to mature.

NORTHWESTERN DENT—An early maturing red dent corn desirable in high altitudes and where seasons are short.

Kaffir Corn

3-5 lbs. per acre in drills. 40-50 lbs. broadcast for fodder.

An excellent fodder plant. It grows 4 to 5 feet high, making a straight upright growth. The stem or stalk bears enormous wide leaves. The stalks are brittle and juicy not hardening like other varieties of Sorghum. It makes excellent fodder, either green or dry, which is highly relished by cattle and all kinds of stock. Planting should be done about May 10th in drills and cultivation should be same as for corn. Requires much warm weather for best results.

Price, per pound, 15c

Kale

Thousand Headed

1 oz. makes 3,000 plants. 4-5 oz. plants an acre.

A deep, well drained rich loam soil is best for this crop, hence the ordinary valley silt loam soil, if well drained, thoroughly tilled, and heavily manured, will produce excellent yields. A long, narrow, slightly sloping field running alongside a piece of sod ground, or a wide sodded fence row, or one of the farm lanes is preferable, as the hauling then may be done on the firmer ground during the wet winter weather. The kale should not be planted on the sod ground itself, however, as this often leads either to injury from cutworms or from drying out of the soil where the sod is not thoroughly broken down.

The kale ground should be heavily manured and deeply plowed in the fall if possible, and replowed once in the early spring, and again before transplanting. If fall plowing cannot be done, manuring during winter and spring and deep early spring plowing and discing, repeated twice before transplanting, will put the ground in good

shape. Following the second plowing and discing the ground should be kept clean of weeds and thoroughly mulched to conserve moisture by frequent light harrowing until transplanting time.

For transplanting, the seed should be sown in drill rows about three feet apart, as early in March as it is possible to get on the ground. If possible a strip of the best drained ground on the farm should be used for growing the young plants, and this should be manured and plowed in the fall so that it need only be replowed and worked down at once for seeding in the early spring, thus getting the plants started as early as possible. On sandy loams the seeding need not be done so early, unless very early fall feed is desired. One pound of seed will furnish more than enough plants for an acre.

LILLY'S Thousand Headed KALE—The abundant, enormously large, cabbage-like leaves are sweet and tender.

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 60c

Mangel or Stock Beet

1 oz. plants 100 feet of row. 10-15 lbs. per acre in drills. 6-8 lbs. per acre in hills.

Culture is very similar to table beets except that the rows are planted from sixteen to twenty-four inches apart to allow for horse cultivation and because the roots attain enormous size they are thinned to stand twelve to sixteen inches apart. Plant during late May or early June on well prepared, seedbed that has been lightly fertilized. It pays to grow Mangels on your best piece of ground. Keep well cultivated and free from weeds. The matured roots will not stand freezing and must be stored where they can be protected.

Prices All Varieties

Pkt., 10c; ½ lb., 20c; 1 lb., 40c; 10 lbs., $3.50

LILLY'S SLUDSTRUP—Long, tapered, smooth, of immense size, reddish yellow color, grows well above the ground, remarkable yielder.

GIANT INTERMEDIATE—Roots large, medium length, neck small, flesh white, a big cropper.

LONG RED—Very long, large red skinned roots, flesh tinged red, grows well above ground.

HALF SUGAR—Good sized white roots, combining size of Mangel with sweetness of Sugar Beets.

GOLDEN TANKARD—Short, tankard shaped roots of immense size, flesh yellow.

YELLOW GLOBE—Has very small top and grows on top of the ground, yellow.

Marrow Kale

or "Chou Moellier"

1 oz. makes 2,500-3,000 plants.

The culture is the same as for Kale and Cabbage.

Marrow Kale or Cabbage is a hybrid secured by crossing kohl-rabi, thousand headed kale and the Jersey chou. It resembles kale very closely when young, but as it grows older the stalk enlarges, reaching a diameter of from three to six inches at the largest part. The stalk varies in height from two to four feet, depending upon the richness of the soil, and often weighs ten or more pounds. It has a solid pith, or marrow, and it is from this that it takes its name. A peculiar habit of the marrow cabbage is that the lower leaves enlarge and then turn yellow and fall off. Then the next lower leaves enlarge and in due time turn yellow and fall, and so on until the stalk becomes bare for two-thirds or more of its length. These leaves may be pulled off and fed just before they begin to turn yellow. The stalks are relished by cows, hogs and poultry and the tonnage per acre is enormous.

Pkt., 10c; Oz., 35c; ¼ lb., $1.00 Lb., $3.00

Field Peas

120-180 lbs. per acre.

A valuable grain, hay, silage and green manure crop for the Northwest. The "corn" of the north Pacific coast. They should be sown very early in the spring as they like cool growing weather. Well drained loam soil is best.

Field peas (Pisum arvense) are well adapted to the conditions of Western Oregon and Western Washington. They do well on a large variety of soils, but are especially adapted to clay soils and alluvial bottoms. They are grown for grain, hay, ensilage and soiling. Peas are nutritious, and the hay and ensilage are eaten with relish by most kinds of stock. When grown for hay about 2 bushels of peas and 2 bushels of oats per acre are sown together as early in the spring as the condition of the ground will permit. When sown at the same time the oats often choke out the peas. This may be largely avoided by sowing the peas first, preferably with a drill

Field Peas— Continued

since the seed is difficult to cover and when they have sprouts on them about 2 inches long, drill in the oats. This will give the peas the start and they will hold their own much better. If sown broadcast they should be well covered with a disk harrow. Peas should be cut for hay when the seeds in the first pods are just ready for table use. Sown in the early spring they mature for hay from the 1st to the 15th of July. The yield is from 1½ to 4 tons per acre. When harvested for seed the yield is usually from 25 to 30 bushels per acre. Peas are often sown alone and harvested when mature by swine turned into the field.

LILLY'S Yellow Canadian—The most generally grown variety of peas, both for stock feed and human consumption. Seed is small, smooth and round and the yield large.

Single pound, price 15c postpaid

LILLY'S Green Field PEAS—A selected strain of blue or green peas, sometimes called Bluebell. Seed is larger than the Yellow Canadian, but similar in all other respects except color.

Single pound, price 15c postpaid

LILLY'S Marrowfat PEAS—A special strain of medium sized Marrowfats adapted to the Northwest. They are larger than the varieties listed above and are whitish-yellow in color. A splendid variety for table use, they are very rich and nutritious.

Single pound, price 15c postpaid

WHIP-POOR-WILL COW PEAS—Grown in a limited way in the warmer sections of eastern Oregon and Washington as forage and cover crops. Require warm weather, not adapted to the coast.

Single pound, price 20c postpaid
Quantity prices on application

Pumpkin

4 lbs. plants an acre.

Pumpkins are very easy crops to grow provided they are given warm, rich soil. They require quite a long season and should be planted as early as frost danger is past. Sandy loams are preferred. Plant in hills eight to ten feet apart each way and allow only three or four plants to remain in a hill. Because of their spreading habit Pumpkins are generally planted in patches or fields of corn or potatoes where the vines can grow undisturbed and frequently produce many tons of very desirable hog and cattle feed. Plant some this year.

CONNECTICUT FIELD—Large productive field pumpkin, very good also for pies.

LARGE CHEESE—Large, abundant fruiting sort, thick meat, suitable for canners.

Prices Above Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 35c; Lb., $1.00

JUMBO OR KING OF MAMMOTHS—The largest grown, skin salmon orange, meat very thick.

Pkt., 10c; Oz., 20c; ¼ lb., 50c; Lb., $1.50

Rape, Dwarf Essex

3 to 5 lbs. plants an acre.

Rape (Brassica napus) has been grown in the coast region with excellent results for twenty years. It is a succulent, nutritious forage plant, admirably adapted to the moist mild climate of the Pacific Coast. It stands considerable freezing and is seldom winter-killed west of the Cascade Mountains. It does best on peaty soils, but is not adapted to very light, sandy or heavy clay soils. It is a heavy feeder, and must not be expected to succeed on poor, worn-out land.

Rape is an excellent crop for pasture or soiling, i. e., for cutting and feeding green for hogs, sheep, goats and poultry. Fed to dairy cows it causes a large flow of milk, but to avoid tainting the milk it should be fed immediately after milking, at the rate of 30 to 50 pounds per day, in two feeds. On account of danger of bloating, sheep, goats and cattle should never be turned on rape for the first time when they are hungry, or when the rape is wet with dew or rain. They should have plenty of something else to eat first, and plenty of salt at all times. It is a good plan to give them access to hay or a grass pasture to prevent overloading on rape. When sheep have become accustomed to it they may be left on it continually with but little danger.

Single pound, price 20c Postpaid

LILLY'S LIFE INSURANCE FEED

for Baby Chicks

is without a par—like

LILLY'S CALF MEAL

It's Cooked

and there is nothing else like it.

Rutabaga

1-2 lbs. plants an acre.

Sow the seed from the middle of June to the middle of July, in drills about two and one-half feet apart, covering about one-half inch deep. Thin the young plants eight to twelve inches apart in the row. When the roots are full grown and before hard freezing weather, pull them, cut off the tops and store in a root cellar or pit.

Prices All Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 75c

LILLY'S King of SWEDES—Large, productive, oval shaped, flesh rich yellow, splendid keeper.

AMERICAN PURPLE TOP—Popular for table use and stock, flesh yellow, solid and sweet.

BANGHOLM—Very large, flesh mild, firm and sweet, color yellow, texture fine.

Soy Beans

30-50 lbs. per acre.

Not well adapted west of the mountains. Only the earliest varieties of soy beans are ever grown successfully in the Northwest, as they are very sensitive to frost and require a relatively hot season to mature, much like the sorghums. Soy Beans do best when planted in rows and cultivated. Much the same method of culture is used for Soy Beans that is used for raising garden beans. The stems are woody and of questionable value for roughage, but the seeds are rich in oil and are considered a very concentrated food.

Soy bean meal is the basis of many choice dishes served by the Chinese and Japanese; however, in this country it is used as one of the sources of protein in poultry and dairy feeds.

Single pound, price 25c postpaid

Sugar Beet

1 oz. plants 100 feet of row. 10-15 lbs. plants an acre.

Sugar Beets are desirable not only for sugar making but are valuable for stock feeding and when small may be used for the table. The best soil is a rich, friable sandy, or clayey loam. Rich, mucky soils will often give an immense yield of roots which, though excellent for feed, are of little value for sugar making.

KLEIN WANZLEBEN — Roots larger than most varieties, tops large, leaves waved.

Prices

½ lb., 20c; 1 lb., 40c; 10 lbs., $3.50

Early Amber Cane

Sorghum

3-5 lbs. per acre in drills.

The early amber is the most common variety of cane grown. There are two ways of planting it; one is by broadcasting, sowing from one to two bushels per acre, the other is to drill with a corn planter and cultivate the same as you would corn.

It can be sown any time in May or June and be harvested any time between the time it is a foot high and the first freezing weather.

The cane plant produces from three to eight tons per acre of cured forage and it will withstand drought and other unfavorable conditions that would mean death to any other crop.

However, it is a hot climate crop and only partially succeeds most seasons west of the mountains.

Single pound, price 20c postpaid

Sunflower

Plant 10-15 lbs. per acre.

Sunflowers have attracted a good deal of attention the last few years as a Silage Crop. Planted and cultivated like corn, enormous yields are produced. (Yields as high as 30 tons have been reported per acre.) In the higher altitudes and under dry farming conditions the average yields per acre are greater than that of any other crop.

It is used extensively for feeding poultry and is an excellent egg producer. Also largely planted for hiding unsightly places. The plant often grows ten feet high. Sow seed as soon as ground is fit for planting corn, in rows three to four feet apart and about one foot apart in row. Cultivate the same as corn. This variety will yield 1,000 pounds or more of seed per acre. They do best on light, rich, limestone or alluvial land well supplied with moisture and not shaded by trees or buildings.

LARGE RUSSIAN—This has very large single heads borne at the top of a single unbranched stalk usually, and with much more and larger seed than the common sorts.

Single pound, price 20c postpaid

Turnip

2-4 lbs. plants an acre.

For fall and winter use, the seed should be sown in August or September. For stock food, the seed is sometimes sown broadcast in the field after last cultivation of corn or other cultivated crops.

Turnips are quite hardy and need not be harvested until after several frosts. West of the Cascade Mountains they are sometimes left in the ground until wanted for use during the winter. They may be stored in a cellar or buried in a pit.

Price Following Varieties

Pkt., 10c; Oz., 15c; ¼ lb., 25c; Lb., 75c

PURPLE TOP WHITE GLOBE—Early, globe-shaped, medium sized, yields heavy and keeps good.

PURPLE TOP STRAP LEAVED—Roots flat, medium size, flesh white, fine grained and tender.

GOLDEN BALL OR ORANGE JELLY—Delicious flavored, smooth, round, yellow flesh and skin.

YELLOW ABERDEEN — Large, late, sweet, yellow fleshed, long keeper and very productive.

COWHORN — Long, crooked shaped, white, fine grained, quick growing stock turnip.

Vetch

30-40 lbs. of Hairy Vetch per acre. Other varieties 90-120 lbs. per acre. Less if sown with grain.

The stems of vetch are not strong, and heavy crops are inclined to flatten out on the ground. When in this fallen condition it soon begins to mold and is very difficult to harvest. To furnish support for it and keep it up off the ground a bushel of oats, wheat, or rye, and a bushel of vetch per acre are usually sown together. It is a common practice with vetch growers to sow winter oats and vetch broadcast in the early fall on land that has raised a spring crop to cover the seed with a disk harrow. If the land is loose and easily worked, this method gives good results, but like most other crops vetch gives much better yields if sown on a well prepared seed bed. If the ground is packed, or if the seeding is done in the spring, the land is usually plowed and a good seed bed prepared.

Sown with rye the last of August or early in September, Gray, Hungarian and Purple Vetch should be ready for soiling, i. e., feeding green, from April 15 to May 1; sown with winter oats or wheat October 1st, it should be ready about May 1; sown with winter oats or wheat in the late fall it should be ready about June 1; sown with oats in February, it should be ready about June 15th. It is sown also in the early spring, but fall seeding usually gives the largest yields.

When cut in the early spring for soiling a second crop may be cut or pastured, or the land may be plowed and planted to some other crop.

When seeds are just appearing in the first pods is usually considered the best time to cut vetch for hay. Some cut it earlier than this, while others allow the first seeds to become pretty well mature. If the crop is not too heavy it may be handled in the ordinary way, but it should be put into shocks before the leaves are dry enough to be broken off during the handling.

GRAY VETCH—Is also known as Oregon or Common Vetch. Adapted to either fall or spring planting and well adapted to all sections of the Northwest, especially the Pacific Slope. More Gray Vetch is grown than all other varieties put together.

Single pound, price 20c postpaid

HUNGARIAN VETCH—A new variety developed at O. A. C., that is aphis resistant and adaptable to culture on low, wet and sour soils as well as heavy muck lands.

Single pound, price 20c postpaid

PURPLE VETCH—This variety is not so well adapted to forage production, but seeds heavy on uplands and the seed always commands a good price for cover crops in the citrus section of the south. It is, therefore, grown mostly for seed.

Single pound, price 25c postpaid

HAIRY VETCH—Also called Winter Vetch, is a biennial and is sown in the fall like any winter grain. Because the seed is much smaller than gray vetch, less pounds of seed are required per acre, thirty to forty pounds per acre with grain is sufficient to insure a good crop. Hairy Vetch is used extensively for cover crops in the orchard districts of Oregon and Washington.

Single pound, price 30c postpaid

Quantity prices on application

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Seed and Planting Record

Date Purchased	From Whom	Kind of Seed	Stock Number	Price Paid	Date Planted	Dates Transplanted		Harvesting Data

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Dealer's Name.....

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